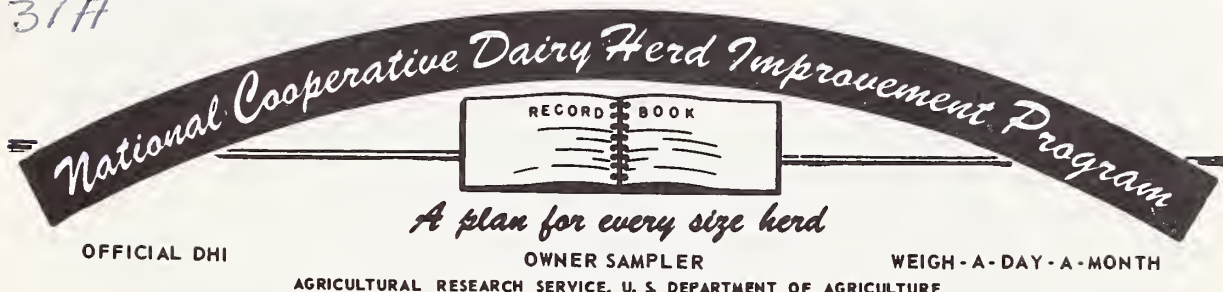


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

A49.9 RESERVE
R31H



Dairy-Herd-Improvement Letter

ARS 44-226
(Vol. 47, No. 3)

March 1971

USDA-DHIA HERD AVERAGE SUMMARIES
1967-68; 1968-69; 1969-70 1/

In the past 3 test years, milk production per cow has continued to increase. The number of cows increased through 1968-69, then decreased in 1969-70. For convenience of interpretation, the 1967-68 test year (May 1, 1967-April 30, 1968) will be referred to as 1968; the 1968-69 year, 1969; and the 1969-70 test year, 1970.

In 1970, 1,937,390 cows on Official DHI (previously Standard Plan) averaged 12,750 pounds of milk and 483 pounds of fat per cow; in 1969, 1,959,647 cows averaged 12,553 pounds of milk and 476 pounds of fat per cow; in 1968, 1,924,200 cows averaged 12,397 pounds of milk and 471 pounds of fat per cow. The number of cows per herd was 62.2 in 1970, up from 57.3 in 1968 and 54.8 in 1967.

As in previous years, summaries were made for both Official DHI and Owner-Sampler herds.

Prepared by G. J. King with the technical assistance of D. K. Thomas, J. J. Corbin, A. H. Kienast, and E. M. Gussman.

Issued June 1971

APR 13 1971

U.S. DEPT. OF AGRICULTURE
NATIONAL COOPERATIVE DAIRY HERD IMPROVEMENT PROGRAM

Official DHI cows superior to all other cows.--The average milk production of cows on Official DHI or Owner-Sampler testing continues to be about 4,000 pounds above the average of all other cows. An average milk price of \$5.75 per hundred-weight made Official DHI superiority worth \$258 per cow in 1970 and Owner-Sampler superiority worth \$226 per cow. The production levels for the three groups are depicted in figure 1 for 1960 (1963 for Owner-Sampler) through 1970 and are shown for selected years since 1930 in table 1 (p. 10)

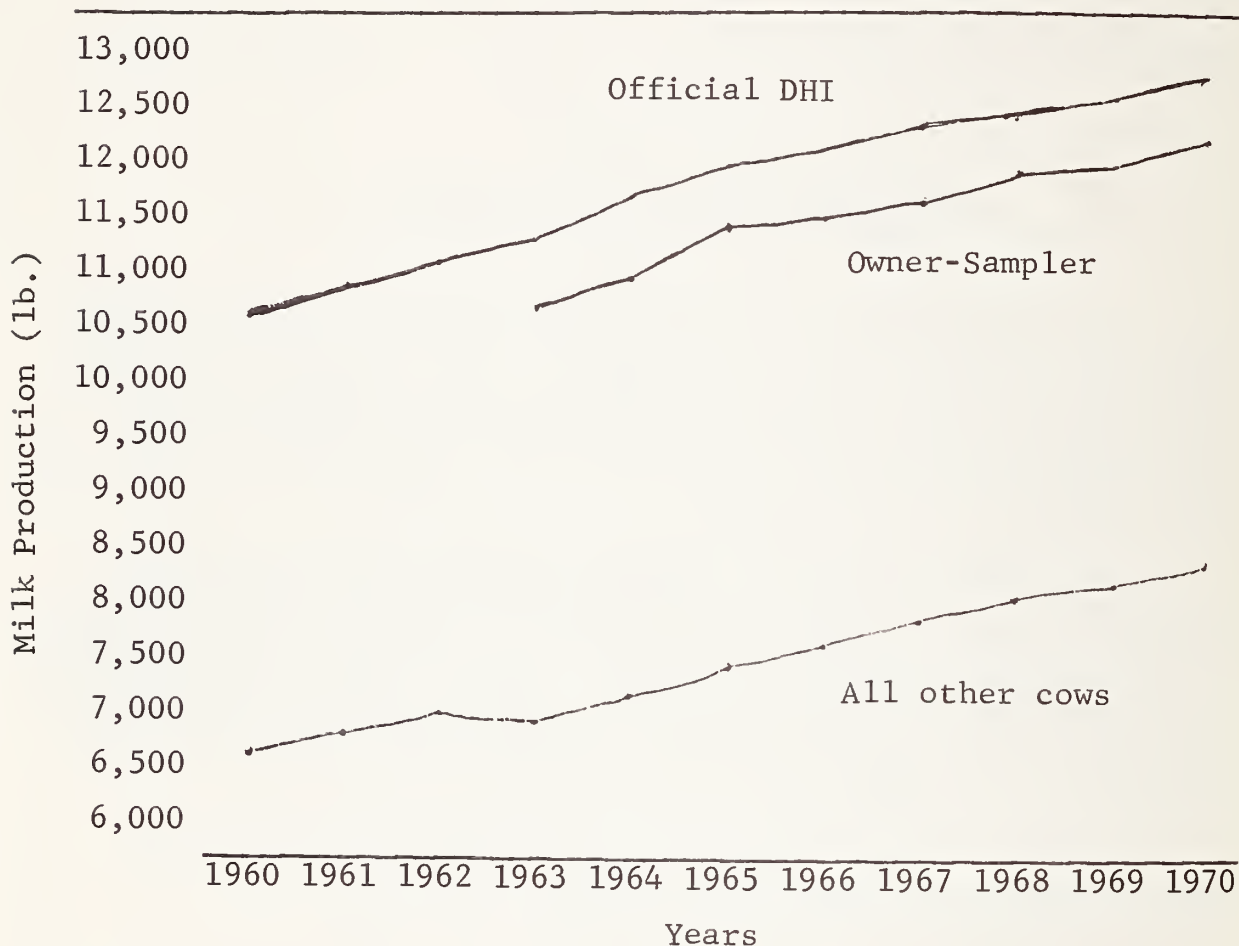


Figure 1.--Comparison of milk production for cows on Official DHI and Owner-Sampler test and for all other cows

The method of comparing U.S. cow numbers with tested cow numbers and their production differences has changed periodically. Table 1 gives these comparisons from 1930 through 1970. Changes have been made in the date for estimating U.S. cow numbers and in the national DHIA testing year. In order to make the best time-period comparison, different values for cow numbers and production have been used in different testing years. The method of calculating each U.S. Official DHI or Owner-Sampler difference is given in the footnotes to table 1.

Historical summaries of testing programs.--A historical summary of cow numbers and production for the various testing plans is included in the annual DHIA Participation Report. This report will be in the April 1971, Dairy-Herd-Improvement Letter. A 13-year summary of Official DHI averages for herds reporting complete information is included in table 2 of this Letter. A summary of Owner-Sampler averages for "complete herds" is in table 3.

Official DHI herd summaries 1968 through 1970.--Tables 4, 6, and 8 list State and national totals for herds and average cows-per-herd and milk and fat production for Official DHI in 1968, 1969, and 1970, respectively. The number of herds on test decreased each year--following the trend for national dairy herd numbers. Nevertheless, cow numbers increased until 1970, so cows per herd increased each year. The production increase was accompanied by a drop in fat percent from 3.80 in 1968 to 3.79 in 1970. Average percent-days-in-milk stayed constant at 85. The herds reporting were 91 to 93 percent of the herds enrolled in Official DHI from 1968 through 1970.

Tables 5, 7, and 9 summarize by State and Nation the three years of data for these herds for which owners submitted complete information, including feed weights, value of product, cost of concentrates, and feed cost. "Complete herds" comprise 74 to 76 percent of those reporting yearly herd averages to USDA. Production in this set of herds increased each year, but at a lesser rate than did production for all herds reported. Concentrates fed increased 100 pounds per year. The feeding of succulent forage moved both up and down for the

period 1967-70 with the highest amount being reported in 1970. Dry forage and pasture fed decreased in all 3 years.

Value of product increased, reflecting both the increased production each year and the greater increase in milk prices being paid in the last 3 years.

Concentrate and feed cost also fluctuated by years, reaching their highest level in 1970. However, milk prices were strong enough for herds to show regularly increasing income over feed cost--to a high of \$463 in 1970. Using the rule of thumb that feed cost equals other costs on a dairy farm, the average cow returned \$190 above all costs. Thus, a 50-cow herd returned an average of \$9,500 to management for the year.

It should be kept in mind that these summaries can best be used where value of product and feed costs are similar to the averages being studied. The figures can then provide levels of comparison for one's own management of feed combinations and costs.

Tables 10 through 14 give the tabulation of the Official DHI "complete herds" by breed for the five major breeds with each table stratified by level of milk production. These tables are on a herd average basis. In 1969, only Ayrshires gained in herd numbers over 1968, and Holsteins stayed even. The other breeds lost herd numbers. For 1970, each breed lost herds. However, in 1969, Ayrshires, Holsteins, and Brown Swiss gained cows over 1968, while the Guernsey and Jersey breeds lost cows. For 1970, all breeds lost cow numbers.

Figure 2 shows these trends as well as the trends for concentrates fed, value of product, cost of concentrates, feed cost, and income over feed cost. In several cases, the direction of trend was not maintained for all levels of production. The arrows indicate the breed average trend.

Breed and year	Herds	Cows	Milk prod.	Conc. fed	Conc. cost	Value prod.	Feed cost	In- come/ FC
Ayrshire								
1969	↑	↑	↑	↑	↓	↑	↓	↑
1970	↓	↓	↑	↑	↑	↑	↑	↑
Guernsey								
1969	↓	↓	↑	↔	↓	↑	↓	↑
1970	↓	↓	↑	↑	↑	↑	↑	↑
Holstein								
1969	↔	↑	↑	↑	↓	↑	↓	↑
1970	↓	↓	↑	↑	↑	↑	↑	↑
Jersey								
1969	↓	↓	↑	↑	↔	↑	↓	↑
1970	↓	↓	↑	↑	↑	↑	↑	↑
Brown Swiss								
1969	↓	↑	↓	↔	↓	↑	↓	↑
1970	↓	↓	↑	↑	↑	↑	↑	↑

Figure 2.--Trends for selected factors of the herd record by breed, 1968 through 1970. (Each arrow indicates trend of the given year from the previous year.)

The figure illustrates that feed cost was related to the cost of concentrates, and even though both were higher in 1970 than in 1969, value of product was high enough to produce increases in income over feed cost for all breeds.

Figures 3 through 7 (p. 9) show the relationships among herd average milk yield, value of product, and feed cost per cow for 1970 for the Ayrshire, Guernsey, Holstein, Jersey, and Brown Swiss breeds, respectively. The trends are similar for each breed. The value of product per cow rises more

rapidly than feed cost as the level of production increases. These relationships show the economic gains that can be achieved by proper management, feeding, and breeding.

For Holstein herds summarized in table 11, the three years averages show the following in comparison with 1967 figures:

<u>Data Item</u>	<u>Change across production levels 8,000 through 17,000 lbs. incl.</u>			
	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
Income over feed cost (change per 1,000 lb. increase in milk)-----	+\$36	+\$39	+\$42	+\$45
Feed cost-----	+65%	+64%	+58%	+67%
Feed cost per cwt. milk-----	-22%	-29%	-26%	-27%
Income over feed cost-----	+159%	+158%	+163%	+162%

At milk production intervals of 1,000 pounds for Holstein herds averaging 10,000 to 17,000 pounds, the estimated profit per cow per year (defined as income over feed cost greater than feed cost) was as follows for 1967, 1968, 1969, and 1970:

<u>Production level</u>	<u>Profit per cow (\$)</u>			
	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
10,000	50	62	90	94
11,000	68	84	118	131
12,000	89	105	145	163
13,000	109	128	175	192
14,000	130	151	205	225
15,000	155	177	232	256
16,000	167	201	259	282
17,000	203	224	287	312

Smaller than average herds continue to be the highest producers on a herd basis when stratified by breed. This is not entirely true for all herds on a cow-year basis. Table 8 shows that the State with the highest production average in 1970 had the largest average herd size. However, States with production levels ranking 2d, 3d, and 4th in the Nation had herd size below, slightly above, and at the national herd size average, respectively. The State ranking 5th in production level had the second largest herd size.

The Official DHI records were used to prepare the following tabulation--the levels of milk production at or below which dairy profits are not expected in the United States. The only tabulated groups shown unprofitable were Holsteins producing less than 7,000 pounds of milk in each year and Brown Swiss producing 7,470 pounds of milk in 1968.

Breed	Milk ^{1/}	Official DHI herds that do not exceed milk level		Herds tabulated
	<u>Pounds</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>
		<u>1968</u>		
Ayrshire	< 7,800	--	----	436
Guernsey	< 6,730	--	----	1,637
Holstein	6,680	74	0.37	20,079
Jersey	< 5,900	--	----	1,338
Brown Swiss	7,470	25	4.78	523
		<u>1969</u>		
Ayrshire	< 7,730	--	----	438
Guernsey	< 6,760	--	----	1,569
Holstein	6,740	79	.39	20,079
Jersey	< 5,870	--	----	1,277
Brown Swiss	< 7,700	--	----	521
		<u>1970</u>		
Ayrshire	< 7,740	--	----	396
Guernsey	< 6,700	--	----	1,382
Holstein	6,700	60	.32	18,654
Jersey	< 5,890	--	----	1,201
Brown Swiss	< 7,740	--	----	449

^{1/} Not precise because lower production levels were not tabulated.

Owner-Sampler herd summaries.--Summaries of Owner-Sampler herd records for 1968 through 1970 are shown in tables 15 through 25. They include 16,971 herds and 611,819 cows for 1970 producing 12,185 pounds of milk and 453 pounds of fat per cow; 17,908 herds and 614,939 cows for 1969, producing 11,932 pounds of milk and 444 pounds of fat per cow; and 17,318 herds and 592,647 cows for 1968, producing 11,847 pounds of milk and 441 pounds of fat per cow.

Official DHI--Owner-Sampler milk production differences were the same in 1970 as in 1968--Owner-Sampler cows producing 95.6 percent as much as Official DHI cows.

Trends in production and feeding were the same (with a few exceptions) for Owner-Sampler as for Official DHI herds over the 3-year period. The type of change that appears occasionally is exemplified by the Ayrshire cow numbers, which increased by 1,309 in 1970 over 1969 while herd numbers remained the same. The inclusion of a 1,400-cow herd not on test in 1969 made the difference.

ERRATA: 1. On page 23 of the Dairy-Herd-Improvement Letter for December 1970 (ARS 44-222), the figure for high milk for Brown Swiss should be 34,100--not 24,100.

2. On page 5 of the Dairy-Herd-Improvement Letter for February 1971 (ARS 44-225), on the second line, the figures in parenthesis should read: (-2.3 to +1.1 percent). In the fifth paragraph, fourth line, the percent for Brown Swiss should read 17.8, not 18.8.

3. Breed average tables 10 through 14 and 21 through 25 in this letter contain incorrect averages for succulent forage.

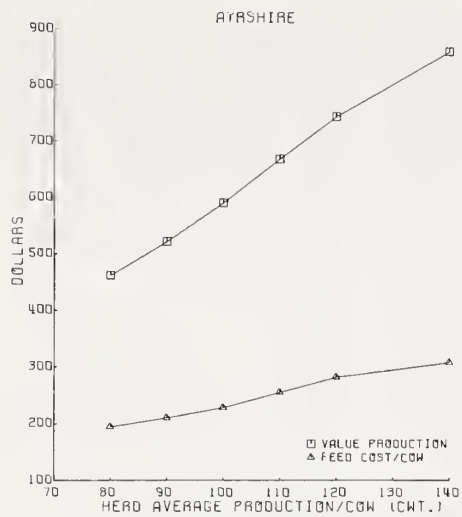


Figure 3.--Value of product and feed cost by level of production for Ayrshire herds in Official OHI.

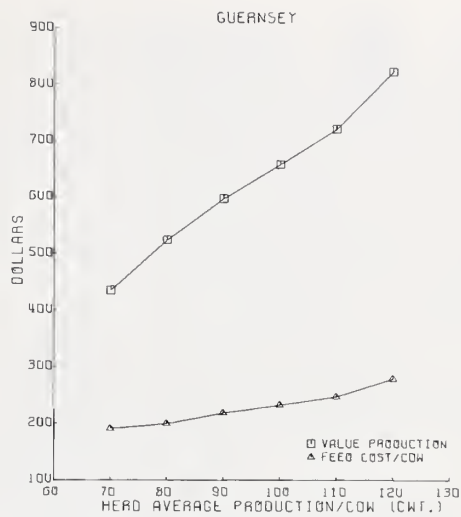


Figure 4.--Value of product and feed cost by level of production for Guernsey herds in Official OHI.

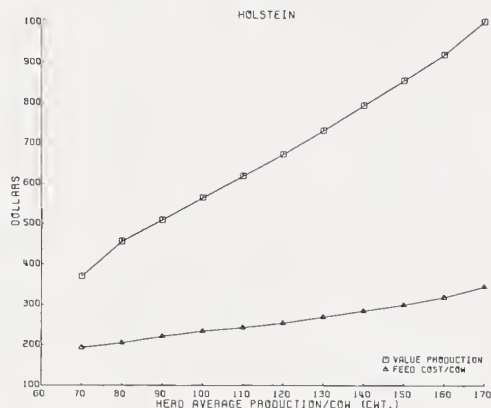


Figure 5.--Value of product and feed cost by level of production for Holstein herds in Official OHI.

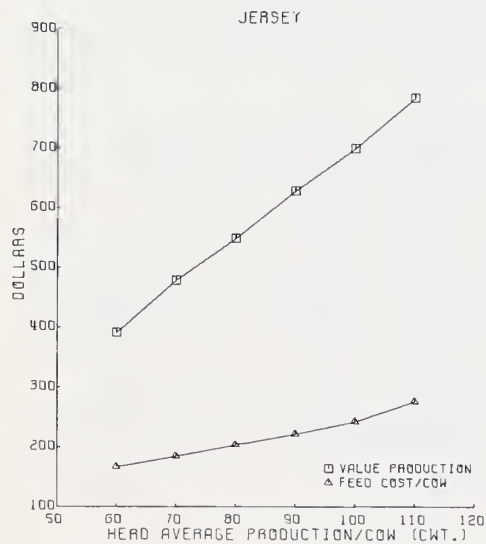


Figure 6.--Value of product and feed cost by level of production for Jersey herds in Official OHI.

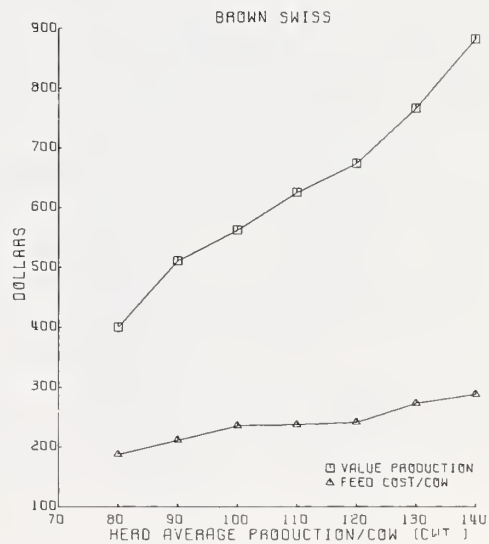


Figure 7.--Value of product and feed cost by level of production for Brown Swiss herds in Official OHI.

TABLE 1.--Comparison of production for cows on Official DHI and Owner-Sampler testing and for all other cows

Testing years <u>2/</u>	Official DHI					Owner-Sampler					All other cows <u>1/</u>					Superiority of O.-S. cows			
	No. Herds	No. Cow-years	Pct. of all cows <u>3/</u>	Lb. Milk	Lb. Fat	No. Herds	No. Cow-years	Pct. of all cows <u>3/</u>	Lb. Milk	Lb. Fat	No. Average cow-years <u>4/</u>	Lb. Milk	Lb. Fat	Lb. Milk	Lb. Fat	Lb. Milk	Lb. Fat	Lb. Milk	Lb. Fat
1930	27,888	507,549	2.35	7,642	303	-----	-----	-----	-----	-----	21,710,451	5/4,435	5/174	3,207	129	-----	-----	-----	-----
1940	27,948	676,141	2.91	8,133	333	-----	-----	-----	-----	-----	22,994,859	4,519	179	-----	-----	-----	-----	-----	-----
1950	40,100	1,088,872	4.94	9,172	370	-----	-----	-----	-----	-----	20,855,128	5,113	202	4,059	168	-----	-----	-----	-----
1959-60	41,293	1,746,752	9.76	10,561	409	24,274	615,899	3.44	-----	-----	15,538,349	6/6,552	6/244	4,039	165	-----	-----	-----	-----
1960-61	42,558	1,876,469	10.66	10,796	418	24,498	655,885	3.74	-----	-----	14,991,646	6,721	251	4,075	167	-----	-----	-----	-----
1961-62	42,034	1,958,355	11.36	11,032	426	24,954	698,302	4.05	-----	-----	14,586,343	6,919	257	4,113	169	-----	-----	-----	-----
1962-63	41,937	2,006,534	11.91	11,286	434	25,376	726,478	4.31	10,606	396	13,817,988	7/6,844	7/255	4,442	179	3,762	141	-----	-----
1963-64	40,670	2,010,144	12.36	11,685	447	25,598	752,229	4.63	10,885	404	13,206,127	7,148	263	4,537	184	3,737	141	-----	-----
1964-65	40,075	2,087,581	13.32	11,976	457	26,604	818,406	5.22	11,402	423	12,409,513	7,352	270	4,624	187	4,050	153	-----	-----
1965-66	38,879	2,058,592	13.77	12,127	462	26,259	839,839	5.62	11,472	425	11,625,070	7,521	276	4,606	186	3,951	149	-----	-----
1966-67	37,683	2,098,919	15.22	12,307	468	25,439	825,127	5.98	11,607	432	10,872,954	7,719	282	4,588	186	3,888	150	-----	-----
1967-68	36,869	2,131,929	16.06	12,397	471	25,143	847,485	6.39	11,847	441	10,290,086	7,923	288	4,474	183	3,924	153	-----	-----
1968-69	35,617	2,138,953	16.65	12,553	476	24,359	842,330	6.56	11,932	444	9,884,217	8,088	293	4,465	183	3,844	151	-----	-----
1969-70	34,308	2,122,011	16.87	12,750	483	23,281	839,343	6.67	12,185	453	8/9,639,646	8/8,359	8/300	4,491	183	3,926	153	-----	-----

1/ Derived from U.S. cow population and production figures, excluding heifers not fresh-published in Dairy Statistics, Economic Research Service, USDA, and Milk Production, Statistical Reporting Service, USDA.

2/ The year for which DHIA enrollment is given. For multiple years, the second year is the year of enrollment. Multiple years are given to match the National DHIA testing year after it changed to May 1-April 30.

3/ Through 1965-66, percentages were calculated by using U.S. calendar year cow numbers for the year previous to the stated year (second year when multiple); for example: January 1, 1966 Official DHI enrollment of 2,058,592 cows is 13.77 percent of the 1965 U.S. total of 14,954,000 cows. From 1966-67 through 1968-69, inclusive, the percentages were calculated by using U.S. cow numbers for December of the year previous to the stated year; for example: January 1, 1967 Official DHI enrollment of 2,098,919 cows is 15.2 percent of the December 1966 U.S. total of 13,793,000 cows. From 1969-70, the percentages were calculated by using U.S. cow numbers for January 1 of the stated year--the same as for Official DHI enrollment. The January 1 number of milk cows and heifers that have calved in the U.S. was first available in 1970. Data were taken from Milk Production, February 1971, Statistical Reporting Service, USDA.

4/ The figures given for years 1930, 1940, and 1950 are the remainder of the U.S.-cows-excluding-heifers-not-fresh after subtracting Official DHI cows for the stated year. The figures for 1959-60 through the end of the table are calculated as in the following example: 1959 U.S. cows plus 1960 cows divided by two, minus Official DHI cows, January 1, 1960, minus Owner-Sampler cows, January 1, 1960.

5/ For 1930, 1940, and 1950, U.S. cow numbers for each year were multiplied by their average production that year; January 1 enrollment of Official DHI cows was multiplied by the average Official DHI production for the year, and this production was subtracted from total production of U.S. cows for the year to obtain the production for all other cows. The number of all other cows was obtained by subtracting January 1, Official DHI cows from U.S. cows for the year. Production averages for all other cows were obtained by dividing production values by cow numbers.

6/ For 1959-60 through 1961-62, production for all other cows was calculated as in the following example: For 1959-60, U.S. milk production for 1959 and 1960 was averaged. Official DHI milk production for 1959-60 was subtracted. Then that figure was divided by the average cow years calculated as explained in footnote 4 to get average milk production for all other cows. Fat production for all other cows was calculated in the same manner. Owner-Sampler production was first tabulated by USDA for 1962-63.

7/ From 1962-63 on, production of all other cows was calculated as explained above, except that Owner-Sampler cow and production totals as well as Official DHI totals were subtracted from U.S. values.

8/ Preliminary.

TABLE 2.--Summary of Official DHI cow-year averages for herds reporting complete data (1955-56 through 1969-70)

Testing year	Herds	Cow-years		Cows per herd	Days in milk		Milk		Fat	Pct.	Lb.	Cwt.	Succ. for- age	Dry for- age	Pas- ture days	Value of product	Cost of conc.	Feed		Income over feed cost
		No.	No.		Pct.	Lb.	Fat	FC/cwt. milk										Dol.	Dol.	
1955-56	28,254	849,344	30.1	--	--	9,470	3.93	372	29	64	39	174	1.91	252			86	181	1.91	252
1956-57	27,133	863,275	31.8	--	--	9,621	3.92	377	30	66	39	173	1.90	265			88	183	1.90	265
1957-58	27,525	900,269	32.7	--	--	9,787	3.91	383	31	69	40	171	1.94	272			92	190	1.94	272
1958-59	27,796	902,074	32.5	--	--	10,042	3.89	391	33	75	40	174	1.94	280			93	195	1.94	280
1959-60	23,220	795,892	34.3	--	--	10,045	3.89	391	33	76	40	169	1.95	283			93	196	1.95	283
1960-61	18,644	689,710	37.0	--	--	10,048	3.88	390	32	78	39	163	1.97	287			94	198	1.97	287
1961-62	22,853	882,827	38.6	--	--	10,676	3.87	413	36	82	40	175	1.94	295			103	207	1.94	295
1962-63	27,093	1,089,290	40.2	84	84	10,983	3.85	423	39	92	40	156	501	279			113	222	2.02	279
1963-64	27,893	1,173,099	42.1	84	84	11,428	3.84	439	42	98	38	151	521	284			120	237	2.07	284
1964-65	28,237	1,229,676	43.5	85	85	11,744	3.82	449	44	102	38	151	539	295			127	244	2.08	295
1965-66	28,013	1,260,621	45.0	85	85	11,885	3.81	453	45	108	36	114	559	303			133	256	2.15	303
1966-67	27,483	1,282,357	46.7	85	85	12,030	3.82	459	47	113	36	1/124	631	366			143	265	2.20	366
1967-68	25,447	1,257,600	49.4	85	85	12,121	3.81	462	48	120	34	134	667	395			149	271	2.27	395
1968-69	25,208	1,271,983	50.5	85	85	12,223	3.80	465	49	2/122	33	132	700	434			146	266	2.21	434
1969-70	23,130	1,227,860	53.1	85	85	12,428	3.79	471	50	124	32	129	736	463			153	273	2.23	463

1/ Data unavailable. Average of adjacent years used.

2/ Some data unavailable. Figure includes calculated averages for States missing data.

TABLE 3.--Summary of Owner-Sampler cow-year averages for herds reporting complete data (1962-63 through 1969-70) 1/

Testing year	Herds	Cow-years	Cows per herd	Days in milk	Milk	Fat	Fat	Pct.	Lb.	Cwt.	Succ. for-age	Dry for-age	Pas-ture days	Value of product	Cost of conc.	Feed cost	FC/cwt. milk	Income over feed cost
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.					Cwt.	No.	Dol.	Dol.	Dol.	Dol.	Dol.
1962-63	4,165	136,781	32.8	83	10,785	3.72	402	37	83	46	147	2.03	241		113	219	2.03	241
1963-64	3,033	80,172	26.4	83	10,987	3.74	411	40	80	44	143	1.86	223		103	204	1.86	223
1964-65	6,355	197,385	31.0	84	11,470	3.72	427	41	89	44	2/137	1.99	258		119	228	1.99	258
1965-66	7,096	224,616	31.6	84	11,574	3.72	430	42	95	42	2/137	2.05	262		121	237	2.05	262
1966-67	7,537	243,943	32.4	84	11,645	3.72	433	43	98	43	2/137	2.08	321		130	242	2.08	321
1967-68	5,928	212,380	35.8	84	11,834	3.72	440	44	103	40	130	2.21	357		142	259	2.21	357
1968-69	7,614	263,703	34.6	84	11,953	3.70	443	46	2/104	41	123	2.05	391		133	243	2.05	391
1969-70	7,134	259,195	36.3	84	12,102	3.68	446	47	104	40	116	2.08	417		139	249	2.08	417

1/ Owner-Sampler records were first tabulated by Dairy Herd Improvement Investigations, USDA in 1964 for the 1962-63 testing year.

2/ Data unavailable. Average of adjacent years used.

TABLE 4.--State production averages on a cow-year-basis including all herds-Official DHI^{1/}
(USDA-DHIA Herd Summary Data--May 1, 1967-April 30, 1968)

State	Herds	Cow-years ^{2/}	Cows per herd	Days in milk	Cow-year average production		
					Milk	Fat	Fat
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.
Alabama-----	287	27,119	94.5	83	10,192	3.82	389
Alaska-----	4	154	38.5	83	12,191	3.65	445
Arizona-----	54	12,343	228.6	83	12,086	3.60	436
Arkansas-----	71	3,814	53.7	83	11,583	3.60	417
California-----	1,711	339,147	198.2	84	13,306	3.77	502
Colorado-----	206	15,864	77.0	85	12,710	3.68	468
Connecticut-----	376	21,348	56.8	85	12,891	3.86	498
Delaware-----	79	4,204	53.2	85	11,440	3.88	444
Florida-----	89	14,811	166.4	84	10,088	3.88	392
Georgia-----	348	28,342	81.4	84	11,319	3.86	437
Hawaii-----	13	3,650	280.8	79	10,734	3.34	358
Idaho-----	515	24,101	46.8	86	12,512	3.80	475
Illinois-----	1,080	44,883	41.6	85	12,176	3.82	466
Indiana-----	919	38,166	41.5	85	12,230	3.89	476
Iowa-----	1,528	54,998	36.0	85	11,933	3.76	449
Kansas-----	729	34,980	48.0	85	12,531	3.73	468
Kentucky-----	418	19,281	46.1	84	11,290	3.80	429
Louisiana-----	66	6,543	99.1	81	9,045	3.92	355
Maine-----	372	17,821	47.9	85	12,142	3.88	471
Maryland-----	577	35,106	60.8	85	12,003	3.90	468
Massachusetts-----	398	18,929	47.6	84	12,279	3.95	485
Michigan-----	1,538	71,199	46.3	87	12,535	3.73	468
Minnesota-----	3,076	106,354	34.6	85	12,426	3.74	465
Mississippi-----	224	17,153	76.6	83	9,412	3.97	374
Missouri-----	436	23,034	52.8	85	11,939	3.80	454
Montana-----	46	2,688	58.4	86	13,053	3.59	469
Nebraska-----	341	15,741	46.2	85	11,995	3.72	447
Nevada-----	37	3,672	99.3	85	12,024	3.83	461
New Hampshire-----	229	11,642	50.8	84	11,975	3.92	470
New Jersey-----	363	22,270	61.4	85	12,513	3.84	480
New Mexico-----	26	6,556	252.1	83	12,237	3.76	460
New York-----	3,312	173,996	52.5	85	13,019	3.69	481
North Carolina-----	686	44,243	64.5	85	12,194	3.78	461
North Dakota-----	124	4,826	38.9	83	11,720	3.66	429
Ohio-----	1,901	82,620	43.5	86	12,050	3.83	462
Oklahoma-----	225	14,071	62.5	83	11,799	3.62	427
Oregon-----	339	22,431	66.2	86	12,074	4.04	488
Pennsylvania-----	4,090	166,278	40.7	85	12,502	3.91	489
Puerto Rico-----	5	751	150.2	83	10,742	3.56	382
Rhode Island-----	42	2,054	48.9	83	11,726	3.56	452
South Carolina-----	244	23,844	97.7	84	10,759	4.07	438
South Dakota-----	144	5,829	40.5	84	12,584	3.67	462
Tennessee-----	427	26,180	61.3	84	10,799	3.97	429
Texas-----	287	27,778	96.8	83	11,237	3.69	415
Utah-----	365	19,507	53.4	86	12,661	3.70	469
Vermont-----	683	35,658	52.2	84	11,880	3.86	459
Virginia-----	841	53,111	63.2	85	12,362	3.78	467
Washington-----	565	37,239	65.9	86	12,994	3.87	503
West Virginia-----	155	7,865	50.7	85	11,625	3.82	445
Wisconsin-----	2,944	128,531	43.7	85	12,560	3.79	476
Wyoming-----	25	1,476	59.0	84	11,657	3.50	408
U.S. total or average-----	33,560	1,924,200	57.3	85	12,397	3.80	471

^{1/} Includes all production data reported.

^{2/} Rounded to the nearest cow-year.

TABLE 5.--State averages on a cow-year basis-complete herds-Official DHI
(USDA-DHIA Herd Summary Data-May 1, 1967-April 30, 1968)

State	Herds	Cow-years ^{1/}	Cows per herd	Days in milk	Milk	Fat	Fat	Conc.	Succ. for- age	Dry for- age	Pas- ture days	Value of product	Cost conc.	Feed cost	FC/cwt. milk	Income over feed cost
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.	Cwt.	Cwt.	Cwt.	No.	Dol.	Dol.	Dol.	Dol.	Dol.
Ala-----	286	26,986	94.4	83	10,186	3.82	389	50	68	15	275	643	165	259	2.58	384
Alaska-----	1	28	28.0	83	11,930	3.43	409	58	154	14	117	1,131	289	536	4.49	595
Ark-----	70	3,807	54.4	83	11,588	3.60	417	47	40	40	215	636	149	275	2.40	362
Conn-----	375	21,202	56.5	85	12,888	3.86	498	56	171	23	83	800	201	344	2.70	456
Del-----	74	3,825	51.7	85	11,387	3.89	443	41	144	21	145	699	137	296	2.65	403
Fla-----	87	14,297	164.3	84	10,084	3.90	394	54	54	27	278	674	167	267	2.69	408
Ga-----	345	28,127	81.5	84	11,299	3.86	436	49	114	13	275	716	167	287	2.57	429
Hawaii-----	12	3,580	298.3	79	10,781	3.33	359	53	69	62	0	942	253	478	4.42	464
Idaho-----	252	13,199	52.4	86	12,505	3.79	474	37	82	75	70	567	107	246	1.99	322
Ill-----	972	41,921	43.1	85	12,215	3.82	467	45	100	36	100	599	112	213	1.76	387
Ind-----	918	38,102	41.5	85	12,225	3.89	476	45	131	31	99	650	122	251	2.08	399
Iowa-----	1,527	54,939	36.0	85	11,935	3.76	449	50	106	42	87	533	125	223	1.90	310
Kans-----	729	34,980	48.0	85	12,531	3.73	468	55	101	47	107	622	154	261	2.11	361
Ky-----	418	19,281	46.1	84	11,290	3.80	429	43	95	23	190	619	126	237	2.14	383
La-----	66	6,543	99.1	81	9,045	3.92	355	43	81	15	309	600	143	255	2.88	345
Maine-----	372	17,821	47.9	85	12,142	3.88	471	49	100	39	128	718	179	298	2.48	420
Md-----	573	34,411	60.1	85	11,984	3.90	467	48	166	20	137	719	157	315	2.65	404
Mass-----	397	18,909	47.6	84	12,282	3.95	485	52	134	32	101	775	188	330	2.72	445
Minn-----	3,071	105,978	34.5	85	12,429	3.74	465	49	112	47	70	549	108	199	1.61	351
Miss-----	224	17,153	76.6	83	9,412	3.97	374	39	113	8	257	560	127	213	2.31	347
Mo-----	436	23,034	52.8	85	11,939	3.80	454	48	80	37	156	613	140	263	2.24	350
Nebr-----	340	15,669	46.1	85	11,992	3.73	447	48	109	48	69	566	129	234	1.97	332
N. H-----	228	11,629	51.0	84	11,979	3.92	470	46	141	37	96	713	166	307	2.59	406
N. J-----	362	21,926	60.6	85	12,551	3.82	479	48	163	29	132	717	169	329	2.64	388
N. Y-----	3,311	173,864	52.5	85	13,018	3.69	481	46	138	36	113	699	159	281	2.18	418
N. C-----	684	44,151	64.5	85	12,194	3.78	461	52	178	10	157	787	179	308	2.56	479
N. Dak-----	124	4,826	38.9	83	11,720	3.66	429	44	88	62	71	522	101	200	1.73	322
Ohio-----	1,900	82,571	43.5	86	12,050	3.83	462	45	132	34	95	661	125	260	2.19	402
Okla-----	225	14,071	62.5	83	11,799	3.62	427	50	44	60	161	618	146	274	2.37	343
Oreg-----	19	1,453	76.5	85	12,257	4.04	495	43	97	49	143	663	148	296	2.43	367
P. R-----	5	751	150.2	83	10,742	3.56	382	42	0	0	365	845	194	292	2.73	552
Pa-----	4,082	165,939	40.7	85	12,507	3.91	489	49	115	37	131	698	168	310	2.51	389
R. I-----	41	2,010	49.0	84	11,898	3.85	458	48	145	28	99	783	177	350	2.97	433
S. C-----	244	23,844	97.7	84	10,759	4.07	438	46	130	16	288	711	148	269	2.54	442
S. Dak-----	144	5,829	40.5	84	12,584	3.67	462	48	115	50	71	572	121	233	1.87	339
Tenn-----	424	26,080	61.5	84	10,793	3.97	429	42	120	18	179	661	136	260	2.45	400
Tex-----	287	27,778	96.8	83	11,237	3.69	415	51	60	43	208	674	151	277	2.51	398
Vt-----	683	35,658	52.2	84	11,880	3.86	459	43	99	40	130	679	158	273	2.33	406
Va-----	839	52,923	63.1	85	12,356	3.78	467	47	158	15	168	762	164	298	2.44	464
Wash-----	155	11,286	72.8	86	13,033	3.94	513	43	85	42	180	671	137	266	2.08	405
W. Va-----	145	7,222	49.8	84	11,610	3.92	445	45	120	26	169	671	154	285	2.49	386
U.S. total or average--	25,447	1,257,600	49.4	85	12,121	3.81	462	48	120	34	134	667	149	271	2.27	395

^{1/} Rounded to the nearest cow-year.

TABLE 6.--State production averages on a cow-year-basis—including all herds—Official DHI^{1/}
(USDA-DHIA Herd Summary Data—May 1, 1968–April 30, 1969)

State	Herds	Cow-years ^{2/}	Cows per herd	Days in milk	Cow-year average production		
					Milk	Fat	Fat
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.
Alabama-----	250	25,333	101.3	83	10,297	3.78	390
Alaska-----	4	144	35.9	83	12,066	3.62	437
Arizona-----	73	15,175	207.9	84	12,873	3.58	461
Arkansas-----	78	4,106	52.6	83	11,555	3.58	414
California-----	1,648	345,631	209.7	86	13,567	3.74	508
Colorado-----	208	15,499	74.5	86	13,016	3.70	482
Connecticut-----	372	21,867	58.8	85	13,163	3.80	500
Delaware-----	80	4,434	55.4	86	11,764	3.90	459
Florida-----	92	15,862	172.4	83	9,881	3.84	380
Georgia-----	343	28,291	82.5	85	11,523	3.84	443
Hawaii-----	-----	-----	-----	---	-----	-----	---
Idaho-----	508	25,670	50.5	86	12,597	3.79	478
Illinois-----	1,210	51,481	42.5	85	12,343	3.82	471
Indiana-----	875	36,875	42.1	85	12,161	3.88	472
Iowa-----	1,521	56,221	37.0	85	11,911	3.78	451
Kansas-----	751	36,717	48.9	85	12,607	3.74	471
Kentucky-----	408	18,018	44.2	84	11,513	3.80	437
Louisiana-----	81	7,496	92.5	83	9,679	3.86	374
Maine-----	347	17,350	50.0	85	12,476	3.84	480
Maryland-----	592	37,539	63.4	85	12,333	3.88	479
Massachusetts-----	381	18,108	47.5	85	12,691	3.92	498
Michigan-----	1,441	69,341	48.1	87	12,550	3.74	469
Minnesota-----	3,136	112,158	35.8	85	12,715	3.74	476
Mississippi-----	216	17,207	79.7	84	9,927	3.97	394
Missouri-----	480	25,628	53.4	85	11,874	3.80	452
Montana-----	53	3,424	64.6	87	12,701	3.64	462
Nebraska-----	373	17,437	46.7	85	11,878	3.75	446
Nevada-----	31	3,103	100.1	85	12,450	3.86	481
New Hampshire-----	211	10,981	52.0	84	12,185	3.93	479
New Jersey-----	342	21,676	63.4	85	12,738	3.82	486
New Mexico-----	26	9,107	350.3	83	12,780	3.67	469
New York-----	3,281	175,649	53.5	85	13,209	3.68	487
North Carolina-----	655	43,140	65.9	86	12,601	3.78	477
North Dakota-----	132	5,158	39.1	83	11,910	3.70	441
Ohio-----	1,837	81,684	44.5	86	12,018	3.84	462
Oklahoma-----	241	15,796	65.5	83	11,712	3.65	428
Oregon-----	351	25,811	73.5	86	12,060	4.06	490
Pennsylvania-----	3,874	164,934	42.6	85	12,319	3.88	478
Puerto Rico-----	5	743	148.6	81	9,574	3.40	326
Rhode Island-----	33	1,646	49.9	84	12,485	3.79	473
South Carolina-----	253	25,714	101.6	85	10,914	4.05	442
South Dakota-----	146	6,107	41.8	84	12,489	3.68	459
Tennessee-----	426	26,605	62.5	85	11,153	3.92	438
Texas-----	272	25,526	93.8	83	11,286	3.64	411
Utah-----	367	19,744	53.8	86	12,700	3.69	469
Vermont-----	681	36,361	53.4	84	12,188	3.84	468
Virginia-----	829	55,298	66.7	86	12,501	3.78	472
Washington-----	628	42,709	68.0	86	13,401	3.85	516
West Virginia-----	164	8,423	51.4	85	11,870	3.83	455
Wisconsin-----	2,808	125,481	44.7	86	12,654	3.80	481
Wyoming-----	16	1,246	77.8	84	11,645	3.58	417
U.S. total or average-----	33,130	1,959,647	59.2	85	12,553	3.79	476

^{1/} Includes all production data reported.
^{2/} Rounded to the nearest cow-year.

TABLE 7.--State averages on a cow-year basis--complete herds--Official DHI
(USDA-DHIA Herd Summary Data--May 1, 1968-April 30, 1969)

State	Herds	Cow-years ^{1/}	Cows per herd	Days in milk	Milk	Fat	Fat	Conc.	Succ. for- age	Dry for- age	Pas- ture days	Value of product	Cost conc.	Feed cost	FC/cwt. milk	Income over feed cost
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.	Cwt.	Cwt.	Cwt.	No.	Dol.	Dol.	Dol.	Dol.	Dol.
Ala-----	246	25,020	101.7	83	10,280	3.79	390	53	2/75	13	272	654	168	263	2.61	391
Ark-----	77	3,973	51.6	83	11,776	3.58	421	48	26	40	247	684	149	276	2.37	408
Conn-----	372	21,867	58.8	85	13,163	3.80	500	57	175	22	67	861	200	335	2.57	526
Del-----	80	4,434	55.4	86	11,764	3.90	459	43	159	18	128	764	140	294	2.55	470
Fla-----	86	14,411	167.6	84	9,802	3.90	383	59	2/57	24	296	686	168	270	2.80	417
Ga-----	332	27,307	82.3	84	11,397	3.85	439	50	2/118	10	289	721	165	286	2.54	435
Idaho-----	246	13,512	54.9	86	12,638	3.84	485	39	92	76	55	584	111	240	1.93	344
Ill-----	1,206	51,294	42.5	85	12,345	3.82	471	47	96	35	105	641	113	209	1.72	432
Ind-----	875	36,875	42.1	85	12,161	3.88	472	46	133	30	103	672	121	248	2.07	424
Iowa-----	1,521	56,221	37.0	85	11,911	3.79	451	51	106	40	92	566	123	221	1.89	345
Kans-----	751	36,717	48.9	85	12,607	3.74	471	56	105	46	101	661	151	257	2.06	404
Ky-----	408	18,018	44.2	84	11,513	3.80	437	43	2/100	24	181	647	125	233	2.07	414
La-----	80	7,483	93.5	83	9,682	3.86	374	46	2/72	15	328	644	151	259	2.77	385
Maine-----	347	17,350	50.0	85	12,476	3.85	480	52	111	38	119	780	185	303	2.45	477
Md-----	585	36,207	61.9	85	12,332	3.89	480	50	165	23	123	773	160	310	2.54	463
Mass-----	380	18,094	47.6	85	12,693	3.92	498	54	136	32	98	837	195	334	2.67	503
Minn-----	3,130	111,917	35.8	85	12,715	3.74	476	50	112	46	72	583	107	199	1.58	384
Miss-----	216	17,207	79.7	84	9,927	3.97	394	41	2/107	8	273	610	130	218	2.24	391
Mo-----	480	25,628	53.4	85	11,874	3.80	452	49	82	37	155	641	137	262	2.25	379
Nebr-----	373	17,437	46.7	85	11,878	3.75	446	49	107	48	69	590	130	232	1.98	358
N. H-----	210	10,886	51.8	84	12,180	3.92	478	46	139	35	94	762	165	305	2.54	457
N. J-----	342	21,676	63.4	85	12,738	3.82	486	50	162	30	113	779	171	334	2.65	445
N. Y-----	3,281	175,649	53.5	85	13,209	3.69	487	48	139	35	114	767	162	281	2.15	486
N. C-----	583	38,043	65.3	86	12,174	3.79	462	51	2/181	8	138	802	170	296	2.46	506
N. Dak-----	132	5,158	39.1	83	11,910	3.70	441	46	94	57	88	560	104	208	1.77	352
Ohio-----	1,837	81,684	44.5	86	12,018	3.84	462	47	133	33	101	683	126	257	2.17	426
Okla-----	241	15,796	65.5	83	11,712	3.65	428	51	43	59	158	642	145	272	2.37	370
Oreg-----	29	1,989	68.6	86	13,569	3.96	538	43	105	45	159	728	151	291	2.17	437
Pa-----	3,831	162,631	42.5	85	12,258	3.88	476	49	128	36	125	715	156	289	2.39	426
P. R-----	5	743	148.6	81	9,574	3.40	326	36	0	0	365	749	168	263	2.78	486
R. I-----	33	1,646	49.9	84	12,485	3.79	473	50	150	29	82	857	179	356	2.87	500
S. C-----	250	25,306	101.2	85	10,840	4.06	440	45	2/131	15	293	734	146	272	2.54	463
S. Dak-----	146	6,107	41.8	84	12,489	3.68	459	49	111	47	76	583	122	232	1.88	350
Tenn-----	422	26,398	62.6	85	11,115	3.92	436	44	2/130	17	175	697	140	265	2.42	431
Tex-----	267	25,214	94.4	83	11,242	3.65	410	52	2/54	41	220	700	150	268	2.43	432
Vt-----	679	36,290	53.4	84	12,195	3.84	468	45	103	38	135	739	163	278	2.31	461
Va-----	796	53,258	66.9	86	12,374	3.78	468	47	2/160	15	152	783	158	291	2.38	493
Wash-----	169	14,116	83.5	86	13,556	3.88	526	45	93	38	165	731	142	283	2.12	448
W. Va-----	164	8,423	51.4	85	11,870	3.83	455	46	125	24	150	703	149	277	2.36	426
U.S. total or average--	25,208	1,271,983	50.5	85	12,223	3.80	465	49	3/122	33	132	700	146	266	2.21	434

^{1/} Rounded to the nearest cow-year.

^{2/} Data unavailable. Figure is average of 1968 and 1970.

^{3/} U.S. figure includes values averaged as explained in footnote 2 above.

TABLE 8.--State production averages on a cow-year-basis--including all herds--Official DHI^{1/}
(USDA-DHIA Herd Summary Data--May 1, 1969-April 30, 1970)

State	Herds	Cow-years ^{2/}	Cows per herd	Days in milk	Cow-year average production		
					Milk	Fat	Fat
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.
Alabama-----	271	29,337	108.3	84	10,655	3.83	408
Alaska-----	5	189	37.8	81	12,183	3.60	439
Arizona-----	61	13,037	213.7	85	13,450	3.64	490
Arkansas-----	84	4,806	57.2	84	11,414	3.56	407
California-----	1,500	333,297	222.2	84	13,777	3.75	517
Colorado-----	221	17,034	77.1	86	12,888	3.69	476
Connecticut-----	348	21,807	62.7	85	13,528	3.77	510
Delaware-----	79	4,404	55.7	86	12,005	3.86	463
Florida-----	107	19,848	185.5	84	10,030	3.80	381
Georgia-----	328	29,646	90.4	85	11,766	3.82	449
Hawaii-----	11	2,561	232.8	82	11,914	3.22	384
Idaho-----	441	24,808	56.3	86	12,606	3.79	478
Illinois-----	1,123	49,195	43.8	86	12,306	3.84	472
Indiana-----	827	36,248	43.8	86	12,307	3.90	480
Iowa-----	1,463	55,109	37.7	85	11,730	3.79	445
Kansas-----	716	35,735	49.9	85	12,509	3.72	465
Kentucky-----	435	21,141	48.6	84	11,637	3.79	441
Louisiana-----	97	9,313	96.0	83	10,020	3.86	387
Maine-----	337	17,216	51.1	86	12,964	3.88	503
Maryland-----	554	37,270	67.3	86	12,580	3.86	486
Massachusetts-----	367	18,277	49.8	85	12,989	3.92	510
Michigan-----	1,177	62,787	53.3	87	12,884	3.78	487
Minnesota-----	3,019	109,969	36.4	86	12,690	3.72	473
Mississippi-----	230	18,846	81.9	84	10,202	3.94	402
Missouri-----	488	27,308	56.0	85	11,783	3.78	445
Montana-----	55	3,678	66.9	85	12,828	3.71	476
Nebraska-----	368	17,475	47.5	85	11,681	3.81	445
Nevada-----	21	2,244	106.8	85	12,376	4.14	512
New Hampshire-----	196	10,698	54.6	85	12,523	3.94	494
New Jersey-----	306	19,790	64.7	85	13,073	3.83	501
New Mexico-----	26	8,055	309.8	84	13,024	3.69	481
New York-----	3,195	177,393	55.5	85	13,545	3.67	497
North Carolina-----	695	48,878	70.3	86	12,677	3.78	479
North Dakota-----	130	5,409	41.6	83	12,142	3.70	449
Ohio-----	1,748	80,166	45.9	86	12,272	3.86	474
Oklahoma-----	268	18,743	69.9	84	12,090	3.62	438
Oregon-----	307	23,949	78.0	86	12,273	4.07	500
Pennsylvania-----	2,897	129,682	44.8	85	12,789	3.88	496
Puerto Rico-----	8	1,168	146.0	79	9,493	3.37	320
Rhode Island-----	29	1,601	55.2	84	12,222	3.80	464
South Carolina-----	255	27,090	106.2	85	11,331	4.04	458
South Dakota-----	139	5,798	41.7	84	12,520	3.64	456
Tennessee-----	437	28,205	64.5	85	11,615	3.90	453
Texas-----	273	26,089	95.6	84	12,039	3.64	438
Utah-----	348	19,635	56.4	87	12,931	3.66	473
Vermont-----	673	36,219	53.8	85	12,502	3.86	483
Virginia-----	844	59,371	70.3	86	12,596	3.77	475
Washington-----	601	45,500	75.7	86	13,543	3.84	520
West Virginia-----	178	9,474	53.2	85	12,124	3.82	463
Wisconsin-----	2,839	130,947	46.1	86	12,968	3.81	494
Wyoming-----	13	947	72.9	83	11,505	3.70	426
U.S. total or average-----	31,138	1,937,390	62.2	85	12,750	3.79	483

^{1/} Includes all production data reported.
^{2/} Rounded to the nearest cow-year.

TABLE 9.--State averages on a cow-year basis--complete herds--Official DHI
(USDA-DHIA Herd Summary Data--May 1, 1969-April 30, 1970)

State	Herds	Cow-years ^{1/}	Cows per herd	Days in milk	Milk	Fat	Fat	Conc.	Succ. for-age	Dry for-age	Pas-ture days	Value of product	Cost conc.	Feed cost	FC/cwt. milk	Income over feed cost
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.	Cwt.	Cwt.	Cwt.	No.	Dol.	Dol.	Dol.	Dol.	Dol.
Ala-----	261	27,941	107.1	84	10,621	3.83	407	52	82	14	261	697	175	273	2.63	424
Ark-----	84	4,806	57.2	84	11,414	3.57	407	49	22	46	233	680	154	298	2.66	382
Conn-----	348	21,807	62.7	85	13,528	3.77	510	60	172	20	64	895	214	349	2.60	547
Del-----	79	4,404	55.7	86	12,005	3.86	463	44	136	18	143	785	148	304	2.60	480
Fla-----	95	17,263	181.7	84	9,983	3.84	383	58	60	21	266	723	189	261	2.64	462
Ga-----	317	28,617	90.3	85	11,725	3.83	449	51	122	14	274	770	180	298	2.57	473
Idaho-----	252	14,632	58.1	86	12,709	3.80	483	42	96	76	47	609	122	259	2.08	350
Ill-----	966	43,719	45.3	86	12,318	3.83	472	47	104	34	98	664	98	216	1.78	448
Ind-----	827	36,248	43.8	86	12,307	3.90	480	47	132	32	98	696	128	252	2.08	444
Iowa-----	1,463	55,109	37.7	85	11,730	3.79	445	52	109	37	89	584	127	225	1.96	359
Kans-----	716	35,735	49.9	85	12,509	3.72	465	58	105	44	100	685	156	260	2.10	425
Ky-----	434	21,089	48.6	84	11,635	3.79	441	43	104	24	177	675	133	244	2.14	431
La-----	94	8,838	94.0	83	10,065	3.85	388	48	62	17	316	697	168	268	2.72	429
Maine-----	336	17,178	51.1	86	12,959	3.88	503	54	125	34	115	834	194	314	2.44	520
Mass-----	366	18,183	49.7	85	12,989	3.93	510	57	145	29	93	873	205	345	2.70	528
Minn-----	3,011	109,634	36.4	86	12,688	3.73	473	51	113	45	62	610	109	202	1.61	408
Miss-----	229	18,787	82.0	84	10,207	3.94	402	41	102	9	278	639	137	223	2.22	416
Mo-----	487	27,166	55.8	85	11,766	3.78	445	49	83	37	153	656	142	270	2.33	386
Nebr-----	368	17,475	47.5	85	11,681	3.81	445	49	114	45	68	607	131	234	2.02	374
N. H-----	195	10,488	53.8	85	12,558	3.94	495	47	145	34	88	808	171	317	2.55	491
N. J-----	306	19,790	64.7	85	13,073	3.84	501	52	166	29	109	819	177	346	2.67	473
N. Y-----	3,195	177,393	55.5	85	13,545	3.67	497	50	147	34	103	810	172	297	2.21	513
N. C-----	687	48,404	70.5	86	12,692	3.77	479	53	185	10	134	872	186	308	2.46	564
N. Dak-----	130	5,409	41.6	83	12,142	3.70	449	48	94	61	72	599	108	217	1.81	382
Ohio-----	1,748	80,166	45.9	86	12,272	3.86	474	48	135	33	93	711	131	256	2.12	455
Okla-----	268	18,743	69.9	84	12,090	3.62	438	53	43	63	139	690	152	288	2.43	403
Oreg-----	31	2,587	83.5	86	13,419	3.94	529	43	144	46	122	760	152	316	2.36	444
Pa-----	2,792	123,563	44.3	85	12,654	3.88	491	50	126	37	117	773	163	296	2.37	478
P. R-----	8	1,168	146.0	79	9,493	3.37	320	36	0	0	365	762	167	259	2.80	503
R. I-----	29	1,601	55.2	84	12,222	3.80	464	51	154	28	82	853	186	364	3.03	489
S. C-----	254	27,076	106.6	85	11,330	4.04	458	47	132	14	298	777	162	290	2.60	487
S. Dak-----	139	5,798	41.7	84	12,520	3.64	456	50	102	47	73	609	121	230	1.85	379
Tenn-----	436	28,181	64.6	85	11,616	3.90	453	46	140	17	164	741	152	274	2.40	467
Tex-----	273	26,089	95.6	84	12,039	3.64	438	55	49	48	229	767	167	296	2.50	472
Vt-----	672	36,179	53.8	85	12,504	3.86	483	46	105	36	128	782	171	293	2.37	489
Va-----	840	58,959	70.2	86	12,607	3.78	476	46	163	15	157	812	161	291	2.34	521
Wash-----	216	18,162	84.1	87	13,461	3.86	520	50	102	39	152	760	152	300	2.26	460
W. Va-----	178	9,474	53.2	85	12,124	3.82	463	49	131	23	142	729	162	283	2.36	446
U.S. total or average--	23,130	1,227,860	53.1	85	12,428	3.79	471	50	124	32	129	736	153	273	2.23	463

^{1/} Rounded to the nearest cow-year.

TABLE 10.--U.S. averages for Ayrshires on a herd basis--complete herds only--Official DHI
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVFL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEC COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEC COST DOL.
01	33	1,652.6	50.1	81	7,799	4.08	317	32	71	37	155	445	107	214	2.77	231
02	81	3,226.4	39.8	82	9,071	4.01	364	38	78	37	144	493	117	220	2.42	273
03	103	4,026.5	39.1	83	10,023	4.05	406	41	83	37	131	550	129	234	2.33	317
04	113	4,939.6	43.7	84	10,934	4.04	442	44	91	38	136	617	145	259	2.37	358
05	60	2,980.6	49.7	85	11,971	4.04	484	45	111	35	128	679	151	271	2.26	408
06	46	1,600.3	34.8	86	13,368	3.93	525	54	81	42	140	747	186	303	2.26	444
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BRFEO AV.	436	18,426.0	42.3	83	10,535	4.03	424	42	87	37	137	587	138	249	2.37	339

May 1, 1968-April 30, 1969

MILK LEVFL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEC COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEC COST DOL.
01	39	1,606.4	41.2	80	7,732	4.05	313	34	68	37	148	450	105	205	2.65	246
02	58	2,694.9	46.5	82	9,027	3.98	359	37	65	39	160	516	110	212	2.35	304
03	116	4,924.9	42.5	83	10,041	4.03	405	40	81	37	142	584	123	230	2.28	355
04	101	4,155.0	41.1	84	10,970	4.00	439	44	83	37	131	646	142	253	2.31	393
05	77	3,466.8	45.0	85	11,962	4.02	481	48	93	34	132	710	156	271	2.26	439
06	47	1,787.0	38.0	86	13,542	3.94	533	54	85	41	132	811	178	295	2.17	516
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BRFEO AV.	438	18,635.0	42.5	83	10,629	4.01	425	43	81	37	139	624	136	245	2.32	379

May 1, 1969-April 30, 1970

MILK LEVFL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEC COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEC COST DOL.
01	29	1,333.1	46.0	80	7,740	4.03	312	32	75	35	150	462	99	195	2.52	267
02	43	1,791.6	41.7	82	9,026	4.00	362	39	73	37	156	522	111	211	2.33	311
03	87	4,015.3	46.2	83	10,011	3.98	399	40	80	39	145	591	124	229	2.29	362
04	106	4,544.0	42.9	84	11,046	4.01	443	44	98	37	125	669	141	256	2.32	413
05	68	3,080.0	45.3	84	11,965	4.02	481	49	98	34	135	744	164	283	2.37	461
06	63	2,465.8	39.1	86	13,791	3.94	543	54	98	39	134	859	190	309	2.24	550
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BRFEO AV.	396	17,279.8	43.5	84	10,952	4.00	437	44	90	37	138	664	143	254	2.32	410

TABLE 11.--U.S. averages for Guernseys on a herd basis--complete herds only--Official DHI
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FDR. CWT.	ORY FDR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CDNC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	168	9,536.5	56.8	82	6,729	4.71	317	31	80	29	166	421	97	196	2.92	226
02	299	15,432.8	51.6	84	8,057	4.81	387	36	82	32	146	502	109	211	2.62	291
03	464	22,888.2	49.3	85	9,007	4.79	432	39	86	32	140	558	117	222	2.47	336
04	391	18,505.0	47.3	86	9,971	4.79	478	42	86	34	146	622	133	246	2.47	375
05	217	9,878.9	45.5	87	10,944	4.76	521	46	84	34	143	679	145	258	2.36	421
06	98	4,277.5	43.6	88	12,214	4.65	567	49	80	37	146	738	155	273	2.24	465
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	1,637	80,518.9	49.2	85	9,279	4.77	443	40	84	33	146	576	123	231	2.51	345

May 1, 1968-April 30, 1969

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FDR. CWT.	ORY FDR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CDNC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	149	8,755.0	58.8	81	6,758	4.69	317	31	57	32	155	426	90	186	2.76	240
02	269	14,004.3	52.1	84	8,060	4.80	387	37	72	31	146	520	105	208	2.58	312
03	431	20,951.0	48.6	86	9,029	4.78	432	38	70	31	148	581	113	215	2.39	365
04	384	19,860.8	51.7	86	9,994	4.78	478	42	72	34	142	641	124	231	2.31	410
05	221	10,135.9	45.9	87	10,941	4.75	520	47	75	33	145	705	145	252	2.31	453
06	115	5,358.0	46.6	87	12,285	4.62	566	50	80	33	147	775	155	268	2.19	506
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	1,569	79,065.0	50.4	85	9,391	4.76	447	40	71	32	146	602	120	224	2.41	378

May 1, 1969-April 30, 1970

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FDR. CWT.	ORY FDR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CDNC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	113	6,327.0	56.0	82	6,717	4.70	315	32	73	33	141	435	95	191	2.86	244
02	207	10,917.2	52.7	84	8,080	4.75	384	36	80	31	144	524	104	200	2.48	324
03	345	18,320.1	53.1	85	9,046	4.78	433	40	85	32	142	598	116	219	2.42	378
04	373	19,224.8	51.5	86	9,985	4.75	474	42	89	32	138	659	127	233	2.33	426
05	219	10,805.9	49.3	87	10,928	4.75	519	46	89	34	142	722	140	248	2.26	474
06	125	5,692.8	45.5	87	12,313	4.64	570	51	84	34	144	824	164	280	2.28	544
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	1,382	71,287.8	51.6	85	9,558	4.74	453	41	85	33	141	630	124	228	2.40	402

TABLE 12.--U.S. averages for Holsteins on a herd basis--complete herds only--Official DHI
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVEL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERD NO.	OAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PRDO. DOL.	COST CONC. DOL.	FEEO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEO COST DOL.
01	74	3,680.2	49.7	79	6,680	3.69	246	30	71	29	184	357	88	184	2.78	173
02	185	10,800.3	58.4	80	8,079	3.69	298	37	82	32	173	428	107	209	2.58	220
03	502	27,335.9	54.5	81	9,081	3.68	335	38	102	34	150	482	114	224	2.47	257
04	1,229	64,109.7	52.2	83	10,083	3.70	373	41	104	35	144	536	123	237	2.35	299
05	2,394	124,014.2	51.8	84	11,055	3.68	407	44	110	36	133	578	131	247	2.23	331
06	3,824	194,350.8	50.8	85	12,033	3.68	443	47	116	38	123	627	141	261	2.17	366
07	4,456	219,362.1	49.2	85	13,003	3.69	479	50	119	38	121	675	150	274	2.11	402
08	3,897	185,770.5	47.7	86	13,972	3.69	516	53	121	39	118	729	161	289	2.07	440
09	2,224	106,636.7	47.9	86	14,921	3.68	549	56	122	40	119	781	173	302	2.02	479
10	903	41,572.6	46.0	87	15,922	3.67	585	59	120	41	126	838	187	318	2.00	519
11	391	18,229.4	46.6	88	17,200	3.64	626	63	114	43	136	910	207	343	2.00	567
BRFEO AV.	20,079	995,862.4	49.6	85	12,854	3.68	474	49	116	38	125	672	150	273	2.14	399

May 1, 1968-April 30, 1969

MILK LEVEL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERD NO.	OAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PRDO. DOL.	COST CONC. DOL.	FEEO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEO COST DOL.
01	79	4,489.0	56.8	79	6,744	3.76	253	32	66	32	161	368	87	191	2.86	176
02	187	9,494.9	50.8	80	8,060	3.72	300	36	69	34	155	439	102	206	2.55	233
03	462	24,065.9	52.1	82	9,089	3.69	335	39	71	33	154	499	112	220	2.42	279
04	1,093	59,106.0	54.1	83	10,070	3.69	371	42	83	33	143	555	121	233	2.31	323
05	2,305	122,451.8	53.1	84	11,044	3.69	407	45	89	36	131	604	129	243	2.20	361
06	3,714	189,970.1	51.1	85	12,028	3.69	444	48	99	37	125	655	137	255	2.12	400
07	4,530	228,559.0	50.5	85	12,992	3.69	479	51	102	37	121	708	147	266	2.05	441
08	4,020	203,485.7	50.6	86	13,975	3.69	516	53	108	38	121	765	157	280	2.00	485
09	2,345	114,164.2	48.7	86	14,933	3.68	549	56	110	39	119	818	168	293	1.96	525
10	925	43,915.4	47.5	87	15,917	3.65	581	60	111	40	118	873	182	307	1.93	566
11	419	19,381.3	46.3	87	17,240	3.63	625	65	106	44	124	939	201	326	1.89	613
BRFEO AV.	20,079	1,019,083.3	50.7	85	12,918	3.68	476	50	100	37	125	706	147	267	2.08	439

May 1, 1969-April 30, 1970

MILK LEVEL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERD NO.	OAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PRDO. DOL.	COST CONC. DOL.	FEEO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEO COST DOL.
01	60	3,124.5	52.1	80	6,708	3.71	249	34	75	34	170	370	95	194	2.91	176
02	149	8,543.3	57.3	80	8,109	3.72	301	37	89	31	155	457	106	206	2.54	251
03	404	23,145.5	57.3	81	9,055	3.69	335	41	96	33	152	510	118	222	2.46	288
04	945	54,045.9	57.2	83	10,070	3.69	371	43	110	34	134	565	123	235	2.34	329
05	1,917	106,855.6	55.7	84	11,047	3.68	407	46	110	36	129	619	131	244	2.21	375
06	3,151	171,396.6	54.4	85	12,028	3.68	443	49	116	37	121	673	139	255	2.12	418
07	4,109	217,267.6	52.9	86	13,008	3.68	479	51	120	38	115	732	149	270	2.07	462
08	3,915	206,891.6	52.8	86	13,981	3.68	515	54	124	37	115	794	161	285	2.04	510
09	2,436	125,983.1	51.7	87	14,943	3.67	549	57	127	38	113	856	173	300	2.01	556
10	1,063	55,354.5	52.1	87	15,933	3.66	582	60	129	38	114	920	189	319	2.00	601
11	505	25,900.3	51.3	87	17,280	3.62	625	65	122	40	123	1,002	214	345	2.00	657
BRFEO AV.	18,654	998,508.5	53.5	85	13,086	3.68	481	52	119	37	120	741	153	273	2.10	468

TABLE 13.--U.S. averages for Jerseys on a herd basis--complete herds only--Official DHI
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FDR. CWT.	ORY FDR. CWT.	PAST DAYS NO.	VALUE PRDD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	85	5,308.7	62.5	80	5,896	5.05	298	30	49	24	206	375	89	163	2.78	211
02	224	11,376.3	50.8	83	7,045	5.12	361	33	57	27	173	449	101	187	2.65	262
03	394	21,489.0	54.5	84	8,012	5.13	411	37	61	29	164	517	116	205	2.56	312
04	377	19,563.8	51.9	86	8,956	5.16	462	40	69	27	162	582	127	220	2.46	362
05	174	9,534.6	54.8	86	9,898	5.08	503	44	68	30	159	645	147	246	2.48	399
06	84	3,907.1	46.5	87	11,361	4.89	553	48	79	30	150	725	162	269	2.37	456
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	1,338	71,179.5	53.2	85	8,437	5.11	430	38	64	28	166	545	122	213	2.54	332

May 1, 1968-April 30, 1969

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FDR. CWT.	ORY FDR. CWT.	PAST DAYS NO.	VALUE PRDD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	88	5,447.7	61.9	81	5,868	5.08	298	32	28	25	196	390	92	173	2.96	217
02	206	10,729.6	52.1	83	7,103	5.12	363	34	38	26	186	465	99	181	2.55	284
03	362	20,162.1	55.7	85	8,051	5.14	413	38	48	27	166	543	114	202	2.51	340
04	356	18,811.4	52.8	86	8,965	5.10	457	41	48	28	166	604	128	219	2.44	385
05	175	9,399.9	53.7	86	9,935	5.11	508	43	57	27	165	682	144	244	2.45	438
06	90	4,353.3	48.4	87	11,221	4.88	545	49	63	30	144	752	166	264	2.35	488
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	1,277	68,904.0	54.0	85	8,484	5.10	432	39	47	27	169	570	122	211	2.51	359

May 1, 1969-April 30, 1970

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FDR. CWT.	ORY FDR. CWT.	PAST DAYS NO.	VALUE PRDD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	79	4,784.2	60.6	80	5,885	5.07	298	32	46	23	195	391	93	167	2.85	225
02	157	8,106.8	51.6	83	7,091	5.12	363	34	55	25	178	479	105	185	2.61	293
03	306	18,017.1	58.9	84	8,021	5.09	408	38	65	27	172	549	115	204	2.54	345
04	339	19,082.6	56.3	85	8,967	5.12	459	41	67	27	167	629	131	222	2.44	407
05	206	12,264.7	59.5	86	9,951	5.10	508	44	73	29	156	700	145	243	2.48	457
06	114	5,645.3	49.5	87	11,276	4.92	552	49	85	27	146	785	173	277	2.46	507
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	1,201	67,900.7	56.5	85	8,666	5.08	440	40	66	27	167	600	127	218	2.53	382

TABLE 14.--U.S. averages for Brown Swiss on a herd basis--complete herds only--Official DHI
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	25	922.0	36.9	81	7,468	4.02	300	35	97	41	120	366	93	189	2.55	177
02	67	2,189.1	32.7	83	9,096	4.12	375	40	88	39	127	476	114	218	2.40	258
03	96	3,339.8	34.8	84	10,064	4.12	414	43	93	41	122	527	119	227	2.26	300
04	124	4,330.9	34.9	85	11,005	4.12	454	47	101	43	105	575	130	241	2.19	334
05	112	3,962.0	35.4	86	12,023	4.12	495	48	104	43	101	624	132	246	2.05	378
06	68	2,492.2	36.7	87	12,933	4.12	533	52	101	43	123	691	148	267	2.07	423
07	31	1,170.8	37.8	87	14,268	4.12	587	56	113	40	135	792	176	308	2.16	484
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	523	18,406.8	35.2	85	11,081	4.11	456	46	99	42	115	582	130	242	2.20	340

May 1, 1968-April 30, 1969

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	35	1,075.4	30.7	80	7,707	4.15	320	38	74	40	135	418	104	204	2.66	214
02	61	2,166.5	35.5	82	9,129	4.11	375	40	79	39	127	497	111	212	2.32	285
03	98	3,599.5	36.7	84	10,019	4.14	415	44	80	41	125	547	119	225	2.24	322
04	129	4,567.5	35.4	85	10,989	4.13	454	46	89	40	117	602	122	237	2.16	365
05	108	3,791.7	35.1	86	11,994	4.15	498	49	84	45	110	655	130	241	2.01	414
06	55	1,883.7	34.2	87	12,944	4.06	525	54	100	38	126	721	148	262	2.02	459
07	35	1,342.1	38.3	87	14,425	4.09	589	54	100	38	134	834	168	293	2.03	542
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	521	18,426.4	35.4	85	11,014	4.12	454	46	86	41	122	606	126	236	2.17	369

May 1, 1969-April 30, 1970

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	26	866.2	33.3	80	7,741	4.09	316	35	71	39	143	400	93	188	2.45	212
02	50	1,832.3	36.6	83	8,986	4.12	370	39	115	39	90	511	106	212	2.36	299
03	71	2,654.5	37.4	84	10,016	4.15	415	47	95	42	119	563	127	236	2.35	327
04	104	3,663.2	35.2	85	10,993	4.12	452	46	103	39	121	626	126	238	2.16	388
05	99	3,690.2	37.3	86	11,987	4.16	498	51	105	38	105	675	133	242	2.02	433
06	58	2,203.7	38.0	87	12,979	4.07	528	54	104	41	128	767	157	274	2.11	493
07	41	1,450.2	35.4	88	14,411	4.14	596	55	109	37	137	883	165	289	2.00	594
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	449	16,360.3	36.4	85	11,214	4.12	463	48	102	39	117	643	131	242	2.18	401

TABLE 15.--State production averages on a cow-year-basis-including all herds-Owner-Sampler^{1/}
(USDA-DHIA Herd Summary Data-May 1, 1967-April 30, 1968)

State	Herds	Cow-years ^{2/}	Cows Per Herd	Days in milk	Cow-year average production		
					Milk	Fat	Fat
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.
Alabama-----	6	462	76.9	86	10,133	3.50	355
Alaska-----	4	142	35.5	84	11,472	3.39	389
Arkansas-----	51	2,010	39.4	84	10,665	3.70	395
California-----	138	10,535	76.3	84	12,821	3.91	501
Colorado-----	18	874	48.6	85	11,288	3.63	410
Connecticut-----	58	2,691	46.4	83	12,285	3.78	465
Delaware-----	9	246	27.4	82	11,297	3.85	435
Florida-----	6	1,517	252.8	83	9,423	3.84	362
Georgia-----	7	478	68.3	84	12,580	3.82	480
Hawaii-----	1	315	314.6	77	14,446	3.06	442
Idaho-----	16	493	30.8	86	12,122	3.85	467
Illinois-----	285	9,302	32.6	84	11,748	3.72	437
Indiana-----	69	2,444	35.4	84	12,387	3.78	469
Iowa-----	981	26,784	27.3	83	11,434	3.70	423
Kansas-----	115	3,827	33.3	84	11,611	3.68	427
Kentucky-----	31	1,171	37.8	83	10,574	3.68	389
Louisiana-----	4	253	63.1	83	10,322	3.67	379
Maine-----	84	3,290	39.2	84	11,609	3.80	441
Maryland-----	63	2,736	43.4	84	11,303	3.83	433
Massachusetts-----	60	2,331	38.8	84	11,551	3.85	445
Michigan-----	1,133	38,814	34.3	86	12,146	3.70	449
Mississippi-----	5	480	95.9	78	8,184	4.04	331
Missouri-----	80	2,935	36.7	85	11,443	3.76	430
Montana-----	21	1,518	72.3	85	12,386	3.59	445
Nebraska-----	65	2,346	36.1	84	11,646	3.61	421
Nevada-----	3	1,305	435.1	85	13,229	3.30	437
New Hampshire-----	36	1,437	39.9	84	11,144	3.88	432
New Jersey-----	48	3,353	69.9	84	12,424	3.64	452
New Mexico-----	4	386	96.6	82	12,460	3.48	434
New York-----	2,032	79,839	39.3	84	12,289	3.64	448
North Carolina-----	36	1,448	40.2	85	12,175	3.76	458
North Dakota-----	15	358	23.9	82	11,206	3.66	410
Ohio-----	359	11,552	32.2	85	11,596	3.75	435
Oklahoma-----	42	2,231	53.1	83	11,672	3.57	417
Oregon-----	83	3,026	36.5	86	9,961	4.54	452
Pennsylvania-----	1,092	34,136	31.3	84	11,835	3.85	456
South Carolina-----	2	109	54.4	83	11,539	3.72	429
South Dakota-----	188	6,149	32.7	82	11,440	3.56	407
Tennessee-----	4	170	42.5	87	9,688	3.85	373
Texas-----	22	1,376	62.6	82	10,839	3.56	386
Utah-----	20	740	37.0	86	11,898	3.68	438
Vermont-----	250	10,431	41.7	83	10,598	3.92	415
Virginia-----	52	2,114	40.7	85	12,602	3.62	456
Washington-----	39	1,216	31.2	86	11,878	4.04	480
West Virginia-----	20	731	36.5	84	10,842	3.93	426
Wisconsin-----	9,654	312,199	32.3	84	11,816	3.72	440
Wyoming-----	7	349	49.9	80	9,881	3.58	354
U.S. total or average-----	17,318	592,647	34.2	84	11,847	3.72	441

^{1/} Includes all production data reported.
^{2/} Rounded to the nearest cow-year.

TABLE 16.--State averages on a cow-year basis--complete herds--Owner-Sampler
(USDA-DHIA Herd Summary Data-May 1, 1967-April 30, 1968)

State	Herds	Cow-years ^{1/}	Cows per herd	Days in milk	Milk	Fat	Fat	Conc.	Succ. for- age	Dry for- age	Pas- ture days	Value of product	Cost conc.	Feed cost	FC/cwt. milk	Income over feed cost
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.	Cwt.	Cwt.	Cwt.	No.	Dol.	Dol.	Dol.	Dol.	Dol.
Ala-----	6	462	76.9	86	10,133	3.50	355	50	65	30	241	620	155	261	2.58	359
Ark-----	50	2,001	40.0	84	10,672	3.70	395	47	38	27	250	566	154	266	2.52	300
Conn-----	58	2,691	46.4	83	12,285	3.79	465	52	143	26	110	750	190	320	2.64	429
Del-----	9	246	27.4	82	11,297	3.85	435	37	111	19	193	649	123	274	2.42	376
Fla-----	6	1,517	252.8	83	9,423	3.84	362	61	68	19	269	626	223	325	3.47	301
Ga-----	7	478	68.3	84	12,580	3.82	480	39	161	3	203	735	131	292	2.32	443
Hawaii-----	1	315	314.6	77	14,446	3.06	442	65	0	55	365	1,179	319	613	4.24	566
Idaho-----	2	46	22.8	86	8,606	4.52	389	31	37	66	172	383	87	202	2.42	181
Ill-----	132	4,659	35.3	84	11,670	3.68	430	46	86	40	109	536	104	199	1.71	337
Ind-----	69	2,444	35.4	84	12,387	3.79	469	44	135	30	76	640	116	240	1.96	399
Iowa-----	945	25,722	27.2	83	11,402	3.70	422	46	85	45	102	475	109	204	1.81	271
Kans-----	115	3,827	33.3	84	11,611	3.68	427	50	83	48	118	544	138	239	2.07	305
Ky-----	31	1,171	37.8	83	10,574	3.68	389	38	94	14	231	558	114	226	2.18	332
La-----	4	253	63.1	83	10,322	3.67	379	53	21	21	306	653	176	258	2.49	395
Maine-----	84	3,290	39.2	84	11,609	3.80	441	41	84	38	145	666	152	272	2.36	394
Md-----	62	2,692	43.4	84	11,255	3.83	431	46	145	22	164	661	150	286	2.56	375
Mass-----	60	2,331	38.8	84	11,551	3.85	445	47	139	32	99	713	173	311	2.73	401
Miss-----	5	480	95.9	78	8,184	4.04	331	41	132	22	344	506	123	234	2.98	272
Mo-----	80	2,935	36.7	85	11,443	3.76	430	48	45	38	195	550	136	249	2.22	301
Nebr-----	53	1,804	34.0	84	11,591	3.60	417	43	74	54	91	511	110	208	1.81	303
N. H-----	36	1,437	39.9	84	11,144	3.88	432	44	85	46	114	652	162	284	2.60	368
N. J-----	48	3,353	69.9	84	12,424	3.64	452	54	186	26	76	728	167	338	2.74	390
N. Y-----	2,032	79,839	39.3	84	12,289	3.65	448	42	115	41	126	646	147	261	2.14	385
N. C-----	36	1,448	40.2	85	12,175	3.76	458	50	161	13	158	768	170	296	2.45	472
N. Dak-----	15	358	23.9	82	11,206	3.66	410	46	36	53	118	447	106	181	1.62	266
Ohio-----	359	11,552	32.2	85	11,596	3.75	435	43	118	35	96	620	119	240	2.10	379
Okla-----	42	2,231	53.1	83	11,672	3.57	417	46	14	61	195	597	135	266	2.29	331
Oreg-----	2	133	66.3	89	10,440	4.22	441	33	154	34	14	563	114	221	2.14	342
Pa-----	1,090	33,983	31.2	84	11,849	3.86	457	45	99	40	139	646	157	293	2.50	353
S. C-----	2	109	54.4	83	11,539	3.72	429	52	60	21	365	683	172	274	2.35	409
S. Dak-----	188	6,149	32.7	82	11,440	3.56	407	42	101	45	96	480	107	210	1.86	270
Tenn-----	4	170	42.5	87	9,688	3.85	373	37	100	20	201	568	107	222	2.29	346
Tex-----	22	1,376	62.6	82	10,839	3.56	386	52	32	36	298	660	166	288	2.67	372
Vt-----	196	7,775	39.7	83	10,892	3.90	425	39	67	47	145	622	146	258	2.40	364
Va-----	52	2,114	40.7	85	12,602	3.62	456	49	130	17	182	725	169	293	2.35	432
Wash-----	6	284	47.3	85	11,856	4.28	507	39	78	29	172	635	126	239	2.05	395
W. Va-----	19	708	37.2	84	10,918	3.93	429	42	86	25	173	641	143	264	2.41	378
U.S. total or average--	5,928	212,380	35.8	84	11,834	3.72	440	44	103	40	130	615	142	259	2.21	357

^{1/} Rounded to the nearest cow-year.

TABLE 17.--State production averages on a cow-year-basis--including all herds--Owner-Sampler^{1/}
(USDA-DHIA Herd Summary Data-May 1, 1968-April 30, 1969)

State	Herds	Cow-years ^{2/}	Cows per herd	Days in milk	Cow-year average production		
					Milk	Fat	Fat
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.
Alabama-----	5	438	87.7	83	10,537	3.70	390
Alaska-----	6	257	42.8	82	11,230	3.67	412
Arkansas-----	61	2,448	40.1	84	10,867	3.71	403
California-----	69	3,933	57.0	86	12,026	4.02	484
Colorado-----	18	915	50.9	84	11,577	3.70	429
Connecticut-----	56	2,413	43.1	83	12,282	3.79	466
Delaware-----	7	185	26.4	84	11,555	3.92	453
Florida-----	9	3,035	337.2	81	9,128	3.82	349
Georgia-----	2	224	111.9	82	13,246	3.62	479
Idaho-----	19	554	29.2	86	12,209	3.72	454
Illinois-----	293	9,689	33.1	84	11,879	3.74	445
Indiana-----	73	2,742	37.6	84	12,281	3.74	460
Iowa-----	968	27,424	28.3	84	11,516	3.72	428
Kansas-----	122	4,390	36.0	84	11,894	3.63	432
Kentucky-----	30	1,041	34.7	84	11,149	3.72	415
Louisiana-----	2	123	61.5	84	11,401	3.39	387
Maine-----	75	3,035	40.5	85	12,024	3.78	454
Maryland-----	67	2,901	43.3	84	11,726	3.85	452
Massachusetts-----	55	2,282	41.5	84	12,047	3.84	463
Michigan-----	1,082	38,631	35.7	86	12,218	3.71	453
Minnesota-----	1,813	52,064	28.7	84	12,046	3.68	444
Mississippi-----	6	577	96.2	79	8,477	4.13	350
Missouri-----	120	4,443	37.0	85	11,947	3.71	443
Montana-----	21	1,535	73.1	85	12,673	3.56	452
Nebraska-----	61	2,345	38.4	84	11,831	3.61	427
Nevada-----	2	1,426	713.0	85	14,078	3.52	496
New Hampshire-----	37	1,396	37.7	83	11,656	3.85	449
New Jersey-----	47	3,431	73.0	83	12,057	3.63	438
New York-----	1,929	76,621	39.7	84	12,497	3.63	454
North Carolina----	38	1,599	42.1	85	12,125	3.72	452
North Dakota-----	17	503	29.6	83	11,421	3.62	414
Ohio-----	380	12,257	32.3	85	11,644	3.76	438
Oklahoma-----	43	2,307	53.6	83	11,677	3.51	410
Oregon-----	80	3,261	40.8	85	10,749	4.38	471
Pennsylvania-----	1,052	34,184	32.5	84	11,666	3.83	447
South Carolina----	3	143	47.6	87	12,656	3.74	473
South Dakota-----	232	7,689	33.1	82	11,549	3.58	414
Tennessee-----	6	219	36.5	87	10,390	3.88	403
Texas-----	20	1,038	51.9	83	11,461	3.67	421
Utah-----	17	648	38.1	87	12,031	3.65	439
Vermont-----	249	10,314	41.4	83	10,863	3.95	429
Virginia-----	39	1,547	39.7	85	12,841	3.63	466
Washington-----	37	1,525	41.2	85	11,878	3.99	474
West Virginia-----	20	708	35.4	84	11,449	3.94	451
Wisconsin-----	8,615	286,177	33.2	84	11,903	3.73	444
Wyoming-----	6	392	65.3	80	10,692	3.71	397
U.S. total or average-----	17,908	614,939	34.3	84	11,932	3.72	444

^{1/} Includes all production data reported.

^{2/} Rounded to the nearest cow-year.

TABLE 18.--State averages on a cow-year basis--complete herds--Owner-Sampler
(USDA-DHIA Herd Summary Data--May 1, 1968-April 30, 1969)

State	Herds	Cow-years ^{1/}	Cows per herd	Days in milk	Milk	Fat	Fat	Conc.	Succ. for- age	Dry for- age	Pas- ture days	Value of product	Cost conc.	Feed cost	FC/cwt. milk	Income over feed cost
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.	Cwt.	Cwt.	Cwt.	No.	Dol.	Dol.	Dol.	Dol.	Dol.
Ala-----	5	438	87.7	83	10,537	3.70	390	56	2/112	10	109	679	152	272	2.61	407
Ark-----	49	2,098	42.8	84	10,955	3.68	403	50	42	27	203	626	157	261	2.40	366
Conn-----	55	2,392	43.5	83	12,307	3.79	467	52	132	28	110	802	186	319	2.61	483
Del-----	7	185	26.4	84	11,555	3.92	453	37	140	15	147	705	122	269	2.35	437
Fla-----	8	1,985	248.2	80	9,024	3.81	344	70	2/56	11	303	635	205	267	3.02	369
Ga-----	2	224	111.9	82	13,246	3.62	479	75	2/200	2	188	777	174	300	2.27	478
Idaho-----	5	175	34.9	85	11,658	3.71	433	38	43	79	69	483	98	212	1.89	271
Ill-----	136	4,853	35.7	83	12,061	3.71	448	49	91	37	103	587	106	197	1.66	389
Ind-----	73	2,742	37.6	84	12,281	3.75	460	46	139	29	77	659	117	232	1.91	427
Iowa-----	905	25,352	28.0	84	11,468	3.71	426	47	84	44	106	511	110	205	1.81	305
Kans-----	122	4,390	36.0	84	11,894	3.63	432	53	70	51	118	576	137	234	1.99	342
Ky-----	30	1,041	34.7	84	11,149	3.72	415	42	2/93	19	205	620	127	228	2.08	392
La-----	2	123	61.5	84	11,401	3.39	387	62	2/10	34	316	759	208	295	2.60	464
Maine-----	75	3,035	40.5	85	12,024	3.78	454	44	92	38	140	729	158	279	2.34	450
Md-----	67	2,901	43.3	84	11,726	3.85	452	49	148	27	127	720	162	298	2.57	422
Mass-----	55	2,282	41.5	84	12,047	3.84	463	49	145	32	88	782	178	314	2.64	468
Minn-----	1,811	51,972	28.7	84	12,048	3.69	444	47	100	48	86	535	100	192	1.61	344
Miss-----	6	577	96.2	79	8,477	4.13	350	35	2/128	19	302	530	107	208	2.56	322
Mo-----	114	4,238	37.2	85	11,987	3.70	444	49	55	39	182	609	136	254	2.14	354
Nebr-----	41	1,438	35.1	85	12,008	3.59	431	47	96	46	79	566	123	217	1.84	349
N. H-----	37	1,396	37.7	83	11,656	3.85	449	44	93	44	115	707	158	277	2.42	430
N. J-----	47	3,431	73.0	83	12,057	3.63	438	52	198	23	65	739	173	338	2.82	401
N. Y-----	1,927	76,532	39.7	84	12,501	3.63	454	44	111	41	136	711	151	262	2.11	449
N. C-----	35	1,507	43.0	85	11,899	3.72	443	49	2/161	12	139	774	163	282	2.39	492
N. Dak-----	16	466	29.2	83	11,389	3.63	413	46	50	49	126	476	101	184	1.64	292
Ohio-----	380	12,257	32.3	85	11,644	3.76	438	46	116	36	106	648	122	241	2.10	407
Okla-----	41	2,182	53.2	83	11,686	3.51	410	48	19	57	189	628	135	259	2.24	369
Oreg-----	4	197	49.1	86	10,649	4.24	452	33	159	42	74	558	117	226	2.13	332
Pa-----	1,048	33,987	32.4	84	11,663	3.83	447	46	114	39	140	666	148	280	2.43	386
S. C-----	3	143	47.6	87	12,656	3.74	473	53	2/58	17	365	816	175	278	2.20	538
S. Dak-----	220	7,074	32.2	82	11,549	3.59	415	45	95	42	99	508	106	203	1.78	305
Tenn-----	6	219	36.5	87	10,390	3.88	403	41	2/109	21	208	629	120	243	2.35	386
Tex-----	19	1,022	53.8	83	11,380	3.67	418	52	2/49	34	310	731	161	285	2.53	446
Vt-----	198	8,279	41.8	83	11,006	3.90	429	40	70	42	153	669	147	255	2.35	413
Va-----	39	1,547	39.7	85	12,841	3.63	466	49	2/136	19	188	760	159	278	2.18	482
Wash-----	6	318	53.0	85	12,606	4.01	506	45	81	30	184	661	146	279	2.22	382
W. Va-----	20	708	35.4	84	11,449	3.94	451	45	86	25	170	698	149	266	2.35	432
U.S. total or average--	7,614	263,703	34.6	84	11,953	3.71	443	46	3/103	41	123	633	133	243	2.05	391

^{1/} Rounded to the nearest cow-year.

^{2/} Data unavailable. Figure is average of 1968 and 1970.

^{3/} U.S. figure includes values averaged as explained in footnote 2 above.

TABLE 19.--State production averages on a cow-year-basis--including all herds--Owner-Sampler^{1/}
(USDA-DHIA Herd Summary Data-May 1, 1969-April 30, 1970)

State	Herds	Cow-years ^{2/}	Cows per herd	Days in milk	Cow-year average production		
					Milk	Fat	Fat
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.
Alabama-----	7	581	82.9	84	10,689	3.80	407
Alaska-----	6	285	47.4	82	12,411	3.74	464
Arkansas-----	59	2,511	42.6	84	11,325	3.60	408
California-----	19	1,245	65.5	84	11,781	4.00	471
Colorado-----	14	664	47.5	84	12,804	3.60	461
Connecticut-----	51	2,234	43.8	84	12,961	3.80	492
Delaware-----	5	110	22.0	82	11,708	3.88	454
Florida-----	14	5,514	393.9	84	10,496	3.56	374
Georgia-----	3	327	108.8	84	12,922	3.68	476
Hawaii-----	2	622	311.0	79	11,418	3.10	354
Idaho-----	19	603	31.7	85	11,956	3.78	452
Illinois-----	292	10,303	35.3	84	12,119	3.76	456
Indiana-----	67	2,688	40.1	85	12,645	3.73	472
Iowa-----	841	25,093	29.8	84	11,330	3.72	422
Kansas-----	131	5,233	39.9	84	11,623	3.62	421
Kentucky-----	35	1,429	40.8	84	11,443	3.68	421
Louisiana-----	2	125	62.3	83	12,375	3.31	410
Maine-----	79	3,189	40.4	85	12,075	3.79	458
Maryland-----	69	3,139	45.5	85	11,860	3.87	459
Massachusetts-----	51	1,842	36.1	85	12,047	3.85	464
Michigan-----	845	31,956	37.8	86	12,582	3.74	470
Minnesota-----	1,718	51,001	29.7	84	11,969	3.68	440
Mississippi-----	4	360	89.9	79	8,126	4.14	337
Missouri-----	134	5,942	44.3	85	11,581	3.62	419
Montana-----	14	1,161	82.9	83	12,032	3.50	421
Nebraska-----	52	2,050	39.4	85	11,736	3.60	422
Nevada-----	1	1,081	1,080.7	85	14,855	3.18	473
New Hampshire-----	46	1,670	36.3	84	11,924	3.86	461
New Jersey-----	43	3,098	72.0	83	12,314	3.62	446
New York-----	1,816	74,754	41.2	84	12,768	3.61	461
North Carolina-----	35	1,545	44.1	86	12,585	3.79	477
North Dakota-----	13	451	34.7	85	11,860	3.61	428
Ohio-----	382	13,368	35.0	85	11,941	3.74	447
Oklahoma-----	43	2,304	53.6	83	11,818	3.51	415
Oregon-----	64	2,985	46.6	84	10,496	4.37	459
Pennsylvania-----	833	27,763	33.3	84	12,145	3.82	464
South Carolina-----	3	159	53.1	84	12,388	3.62	449
South Dakota-----	269	8,702	32.3	82	11,657	3.57	416
Tennessee-----	6	179	29.9	89	11,626	3.75	436
Texas-----	20	2,381	119.0	84	12,307	3.51	432
Utah-----	21	824	39.2	87	12,718	3.74	476
Vermont-----	207	8,985	43.4	84	11,356	3.92	445
Virginia-----	45	1,880	41.8	85	12,527	3.65	457
Washington-----	27	1,182	43.8	86	12,979	3.88	504
West Virginia-----	22	807	36.7	84	11,660	3.90	455
Wisconsin-----	8,542	297,497	34.8	85	12,238	3.73	457
U.S. total or average-----	16,971	611,819	36.1	84	12,185	3.72	453

^{1/} Includes all production data reported.

^{2/} Rounded to the nearest cow-year.

TABLE 20.--State averages on a cow-year basis--complete herds--Owner-Sampler
(USDA-DHIA Herd Summary Data--May 1, 1969-April 30, 1970)

State	Herds	Cow-years ^{1/}	Cows per herd	Days in milk	Milk	Fat	Fat	Conc.	Succ. for- age	Dry for- age	Pas- ture days	Value of product	Cost conc.	Feed cost	FC/cwt. milk	Income over feed cost
	No.	No.	No.	Pct.	Lb.	Pct.	Lb.	Cwt.	Cwt.	Cwt.	No.	Dol.	Dol.	Dol.	Dol.	Dol.
Ala-----	7	581	82.9	84	10,689	3.81	407	56	160	14	185	699	182	299	2.82	400
Ark-----	59	2,511	42.6	84	11,325	3.60	408	51	30	33	220	651	161	278	2.46	373
Conn-----	50	2,211	44.2	84	12,998	3.80	494	54	140	24	120	858	195	325	2.54	533
Del-----	5	110	22.0	82	11,708	3.88	454	36	130	22	137	729	116	283	2.44	446
Fla-----	12	3,465	288.8	83	10,356	3.67	380	47	44	21	307	749	210	290	2.80	459
Ga-----	1	72	71.5	91	14,687	3.81	560	50	240	2	88	950	180	343	2.34	607
Idaho-----	7	176	25.1	84	10,671	3.95	421	31	42	87	52	471	77	190	1.83	280
Ill-----	154	5,796	37.6	85	12,261	3.75	460	51	98	36	95	635	114	214	1.75	422
Ind-----	67	2,688	40.1	85	12,645	3.73	472	47	139	30	72	696	126	241	1.93	454
Iowa-----	805	23,881	29.7	84	11,305	3.72	420	48	88	41	100	532	113	207	1.86	325
Kans-----	131	5,233	39.9	84	11,623	3.62	421	55	85	48	97	587	144	242	2.09	346
Ky-----	35	1,429	40.8	84	11,443	3.68	421	41	92	21	196	653	131	231	2.04	422
La-----	2	125	62.3	83	12,375	3.31	410	65	0	32	310	829	224	315	2.55	514
Maine-----	79	3,189	40.4	85	12,075	3.79	458	45	108	37	122	750	162	286	2.39	464
Mass-----	51	1,842	36.1	85	12,047	3.85	464	50	128	35	106	799	184	320	2.69	479
Minn-----	1,715	50,782	29.6	84	11,966	3.68	440	48	98	48	78	555	102	192	1.62	363
Miss-----	4	360	89.9	79	8,126	4.15	337	42	125	15	229	527	132	212	2.70	315
Mo-----	133	5,393	40.5	85	11,629	3.62	421	49	53	42	171	606	143	265	2.30	341
Nebr-----	42	1,646	39.2	85	11,702	3.59	420	47	91	49	68	584	126	226	1.96	359
N. H-----	46	1,670	36.3	84	11,924	3.87	461	46	108	42	105	744	167	295	2.50	450
N. J-----	43	3,098	72.0	83	12,314	3.62	446	54	208	21	55	778	181	349	2.86	429
N. Y-----	1,816	74,754	41.2	84	12,768	3.61	461	46	118	39	124	749	160	277	2.18	473
N. C-----	35	1,545	44.1	86	12,585	3.79	477	51	161	10	178	874	177	288	2.33	587
N. Dak-----	11	379	34.4	85	11,842	3.61	428	44	71	46	96	537	96	195	1.67	342
Ohio-----	382	13,368	35.0	85	11,941	3.74	447	47	126	35	95	677	128	246	2.09	431
Okla-----	43	2,304	53.6	83	11,818	3.51	415	51	11	64	180	655	144	279	2.39	376
Oreg-----	3	189	63.1	86	11,744	4.18	491	35	168	46	53	623	126	254	2.16	368
Pa-----	822	27,360	33.3	84	12,113	3.82	463	48	108	40	136	726	155	283	2.36	443
S. C-----	3	159	53.1	84	12,388	3.62	449	52	57	19	365	786	180	287	2.30	499
S. Dak-----	269	8,702	32.3	82	11,657	3.57	416	47	95	43	92	544	108	205	1.77	339
Tenn-----	6	179	29.9	89	11,626	3.75	436	43	118	14	206	690	133	247	2.17	443
Tex-----	19	2,093	110.2	85	12,468	3.51	438	66	67	39	171	805	205	320	2.58	485
Vt-----	201	8,768	43.6	84	11,364	3.92	445	41	77	42	143	710	153	272	2.42	439
Va-----	45	1,880	41.8	85	12,527	3.65	457	47	143	18	177	766	160	282	2.28	483
Wash-----	9	454	50.4	85	11,777	4.06	478	42	81	36	201	664	138	269	2.30	394
W. Va-----	22	807	36.7	84	11,660	3.90	455	47	84	29	158	703	162	279	2.41	424
U.S. total or average--	7,134	259,195	36.3	84	12,102	3.69	446	47	104	40	116	666	139	249	2.08	417

^{1/} Rounded to the nearest cow-year.

TABLE 21.--U.S. averages for Ayrshires on a herd basis--complete herds only--Owner-Sampler
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVEL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEO COST DOL.
01	11	300.2	27.3	79	7,678	4.03	310	29	59	39	135	417	102	191	2.53	226
02	10	319.3	31.9	81	8,959	3.94	353	29	74	42	148	470	101	196	2.20	273
03	11	330.6	30.1	82	10,011	4.02	402	35	77	38	148	536	116	211	2.10	325
04	9	220.1	24.5	86	10,862	4.08	442	45	61	39	139	550	151	236	2.17	314
05	4	142.2	35.6	85	11,945	3.96	473	31	117	31	139	656	110	203	1.70	453
06	4	149.1	37.3	86	13,353	3.86	515	47	87	48	127	721	131	252	1.89	470
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	49	1,461.5	29.8	82	9,859	4.00	394	35	73	39	141	523	117	211	2.18	312

May 1, 1968-April 30, 1969

MILK LEVEL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEO COST DOL.
01	12	315.6	26.3	79	7,829	4.03	315	32	57	42	146	450	106	200	2.56	250
02	12	396.6	33.1	82	9,084	3.91	355	33	62	48	139	499	102	195	2.14	304
03	17	435.4	25.6	82	10,042	3.94	396	41	62	44	138	534	119	211	2.10	324
04	11	324.6	29.5	84	11,037	3.98	439	40	57	44	156	622	134	221	2.00	401
05	6	183.0	30.5	85	11,698	3.81	446	42	94	37	143	650	130	226	1.93	425
06	4	164.2	41.1	87	13,098	3.80	498	49	143	30	88	738	149	268	2.05	469
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	62	1,819.4	29.3	83	9,962	3.94	392	38	69	43	140	551	119	213	2.16	339

May 1, 1969-April 30, 1970

MILK LEVEL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEO COST DOL.
01	10	297.9	29.8	79	7,854	3.80	299	33	31	58	110	437	105	201	2.57	237
02	11	275.4	25.0	81	9,125	3.96	361	36	31	45	172	494	103	186	2.04	308
03	17	511.5	30.1	82	10,059	3.96	398	41	72	41	130	556	125	220	2.19	336
04	11	1,696.2	154.2	84	11,068	3.89	431	36	83	39	144	670	132	227	2.06	443
05	6	191.8	32.0	93	11,834	3.93	465	46	68	50	148	686	168	270	2.28	416
06	4	155.8	39.0	88	13,356	3.90	520	44	124	32	125	799	151	272	2.04	527
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	59	3,128.6	53.0	82	10,103	3.91	395	38	63	45	138	575	125	220	2.20	355

TABLE 22.--U.S. averages for Guernseys on a herd basis--complete herds only--Owner Sampler
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEC COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEC COST DOL.
01	33	793.1	24.0	83	6,800	4.71	320	31	48	42	143	379	98	192	2.83	187
02	52	2,000.1	38.5	84	8,030	4.72	379	34	71	38	136	478	101	201	2.51	277
03	51	1,515.8	29.7	85	9,008	4.63	417	37	63	36	152	502	112	209	2.33	293
04	30	930.0	31.0	85	9,922	4.58	454	43	65	44	156	562	137	242	2.45	320
05	12	385.5	32.1	85	10,889	4.40	479	43	61	40	159	651	148	254	2.33	397
06	13	420.7	32.4	86	12,468	4.15	517	43	132	29	107	697	135	247	1.98	451
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
RRFFD AV.	191	6,045.2	31.6	84	8,857	4.61	406	37	67	39	144	506	114	215	2.46	292

May 1, 1968-April 30, 1969

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEC COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEC COST DOL.
01	28	1,184.3	42.3	82	6,649	4.68	311	31	43	41	144	385	86	169	2.55	216
02	66	1,759.2	26.7	83	8,099	4.74	384	35	69	40	130	475	93	191	2.36	284
03	75	2,272.1	30.3	85	8,997	4.65	418	37	58	39	150	513	102	190	2.11	323
04	47	1,462.9	31.1	85	9,858	4.62	455	44	71	39	141	571	117	207	2.11	364
05	20	519.6	26.0	85	10,865	4.43	491	41	50	44	158	624	119	214	1.96	410
06	18	650.8	36.2	86	12,982	4.06	527	50	117	31	96	706	137	238	1.85	468
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
RRFFD AV.	254	7,848.9	30.9	84	9,094	4.61	417	38	65	39	139	522	104	196	2.19	326

May 1, 1969-April 30, 1970

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEEC COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEEC COST DOL.
01	26	642.6	24.7	82	7,013	4.65	327	32	39	45	140	396	84	169	2.41	227
02	55	1,487.0	27.0	83	8,111	4.68	380	36	59	36	138	470	94	177	2.19	293
03	63	1,984.9	31.5	85	8,990	4.59	413	37	65	40	136	539	100	190	2.11	349
04	60	1,843.8	30.7	86	9,985	4.60	459	43	62	42	144	590	119	206	2.06	384
05	15	326.8	21.8	84	10,927	4.36	476	47	51	41	176	642	148	242	2.22	400
06	18	665.1	37.0	85	12,623	4.03	508	46	117	38	106	740	137	250	1.99	490
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
RRFFD AV.	237	6,950.2	29.3	84	9,220	4.56	418	39	63	40	139	542	108	197	2.15	345

TABLE 23.--U.S. averages for Holsteins on a herd basis--complete herds only--Owner-Sampler
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVFL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PROO. DOL.	COST CONC. DOL.	FEFO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	30	781.3	26.0	81	6,758	3.74	252	26	51	46	154	307	72	164	2.45	143
02	82	2,593.1	31.6	80	8,085	3.67	297	31	65	45	145	391	97	200	2.47	191
03	212	7,396.0	34.9	81	9,097	3.67	334	35	81	42	140	444	106	209	2.30	234
04	454	16,841.6	37.1	82	10,078	3.66	369	38	87	43	136	502	118	227	2.25	275
05	830	31,166.9	37.6	83	11,039	3.66	404	41	91	42	131	556	129	241	2.18	315
06	1,139	41,581.0	36.5	84	11,997	3.65	438	44	97	43	128	600	137	253	2.11	347
07	1,051	39,756.9	37.8	85	12,982	3.65	474	48	102	42	127	657	150	268	2.07	388
08	649	24,580.1	37.9	85	13,938	3.63	507	51	105	41	127	708	164	284	2.04	425
09	278	9,882.1	35.5	86	14,941	3.65	545	54	108	42	128	762	175	299	2.00	463
10	80	2,623.5	32.8	86	15,906	3.63	577	57	110	43	125	821	196	318	2.00	503
11	22	620.4	28.2	86	17,301	3.59	621	60	79	44	165	885	217	339	1.97	546
BRFFD AV.	4,827	177,822.9	36.8	84	12,159	3.65	444	45	97	42	130	612	141	257	2.12	355

May 1, 1968-April 30, 1969

MILK LEVFL RANGE	HEROS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PROO. DOL.	COST CONC. DOL.	FEFO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	44	1,273.6	28.9	79	6,829	3.70	253	26	58	46	156	340	73	169	2.48	171
02	82	2,538.6	31.0	79	8,113	3.65	296	32	62	46	146	403	92	188	2.31	215
03	235	7,808.7	33.2	80	9,049	3.66	332	36	84	43	128	452	100	201	2.22	251
04	604	21,182.9	35.1	82	10,069	3.67	369	40	81	45	131	503	108	211	2.09	293
05	1,059	36,265.6	34.2	83	11,040	3.67	405	43	92	43	122	557	118	223	2.02	334
06	1,509	52,865.5	35.0	84	12,003	3.65	438	46	95	44	118	608	127	234	1.95	375
07	1,432	51,546.4	36.0	85	12,986	3.65	474	50	97	44	122	667	139	247	1.90	419
08	915	32,923.2	36.0	85	13,945	3.63	507	53	97	44	119	719	148	258	1.85	461
09	410	14,592.4	35.6	86	14,918	3.62	539	57	98	44	123	780	165	276	1.85	504
10	112	3,835.5	34.2	86	15,922	3.60	573	59	98	44	121	836	176	287	1.80	549
11	33	1,136.2	34.4	87	17,156	3.60	618	64	101	46	120	908	196	311	1.81	597
BRFFD AV.	6,435	225,968.6	35.1	84	12,245	3.65	447	47	93	44	122	625	131	238	1.96	387

May 1, 1969-April 30, 1970

MILK LEVFL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERO NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST OAYS NO.	VALUE PROO. DOL.	COST CONC. DOL.	FEFO COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	36	912.7	25.4	80	6,715	3.71	249	30	68	43	142	327	79	169	2.53	159
02	82	2,510.5	30.6	80	8,104	3.64	295	32	80	38	141	411	90	188	2.32	224
03	238	7,459.5	31.3	80	9,077	3.67	333	38	75	46	123	454	98	195	2.15	259
04	538	19,222.4	35.7	82	10,066	3.64	367	41	85	43	119	516	111	212	2.10	304
05	934	33,750.7	36.1	83	11,039	3.64	402	43	93	44	116	570	118	223	2.02	348
06	1,357	50,175.5	37.0	84	12,023	3.64	438	48	98	43	112	633	132	239	1.99	394
07	1,374	51,923.8	37.8	85	12,976	3.64	472	50	101	43	111	693	142	252	1.94	441
08	909	33,799.9	37.2	85	13,963	3.63	507	53	104	44	117	757	156	269	1.93	488
09	431	16,747.3	38.9	86	14,916	3.61	539	57	106	43	113	822	170	285	1.91	538
10	147	5,551.8	37.8	86	15,867	3.60	572	60	103	44	115	889	190	307	1.94	582
11	54	1,842.1	34.1	87	17,210	3.60	619	63	97	46	120	954	206	323	1.88	631
BRFFD AV.	6,100	223,896.2	36.7	84	12,347	3.64	449	48	97	43	115	656	136	244	1.99	411

TABLE 24.--U.S. averages for Jerseys on a herd basis--complete herds only--Owner-Sampler
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	15	502.7	33.5	79	5,479	5.10	279	25	41	30	148	323	73	138	2.53	184
02	40	1,371.1	34.3	83	7,068	5.03	356	32	48	38	164	421	104	189	2.67	232
03	62	1,965.0	31.7	84	8,025	4.99	400	35	47	36	153	484	117	200	2.50	284
04	50	1,770.5	35.4	85	8,894	4.90	436	38	56	36	141	548	128	220	2.48	328
05	17	568.8	33.5	85	9,830	4.86	478	44	53	38	157	602	153	252	2.56	350
06	10	331.3	33.1	86	11,596	4.80	554	53	46	37	145	731	189	276	2.39	456
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	194	6,509.4	33.5	84	8,197	4.96	406	36	49	36	151	498	121	207	2.53	291

May 1, 1968-April 30, 1969

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	16	523.7	32.7	78	5,779	5.19	300	27	56	29	128	371	77	151	2.61	221
02	42	1,413.2	33.6	83	7,056	5.05	357	32	44	34	167	425	90	165	2.34	260
03	62	1,756.1	28.3	84	8,074	5.02	405	37	39	41	149	517	119	205	2.54	312
04	48	1,661.9	34.6	85	8,944	4.96	443	40	51	35	142	576	125	210	2.35	366
05	28	913.9	32.6	85	9,851	4.82	474	41	53	37	138	636	136	230	2.33	406
06	10	393.7	39.4	84	11,146	4.34	483	48	49	40	163	791	164	257	2.31	444
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	206	6,662.5	32.3	83	8,282	4.96	409	37	47	36	149	525	116	200	2.42	326

May 1, 1969-April 30, 1970

MILK LEVEL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	FAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	ORY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	13	370.7	28.5	81	6,033	5.17	312	28	51	34	122	374	76	147	2.46	226
02	43	1,256.6	29.2	84	7,143	5.07	362	34	40	36	151	457	101	178	2.50	279
03	53	1,732.7	32.7	84	8,003	5.01	401	37	44	41	134	513	111	193	2.41	320
04	57	2,047.5	35.9	85	8,986	4.92	442	40	51	36	141	590	133	217	2.41	372
05	26	936.2	36.0	86	9,891	4.83	477	41	62	36	146	676	142	242	2.44	434
06	18	642.2	35.7	86	11,622	4.33	501	50	55	42	133	742	172	273	2.35	469
07	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BREED AV.	210	6,985.9	33.3	84	9,515	4.93	417	38	49	38	140	554	122	207	2.43	347

TABLE 25.--U.S. averages for Brown Swiss on a herd basis--complete herds only--Owner-Sampler
(USDA-DHIA Herd Summary Data)

May 1, 1967-April 30, 1968

MILK LEVFL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	EAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	DRY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	7	206.7	29.5	85	7,623	3.96	302	40	89	40	115	367	107	206	2.71	160
02	12	313.3	26.1	79	9,061	4.13	374	37	73	45	120	454	103	206	2.28	248
03	10	286.4	28.6	84	10,111	4.08	413	41	81	45	131	488	115	207	2.04	281
04	13	314.2	24.2	83	10,978	4.08	448	45	76	47	119	510	117	220	2.00	290
05	9	192.1	21.3	84	11,986	4.12	494	46	66	41	144	601	130	230	1.92	371
06	4	106.2	26.6	86	12,995	3.87	503	43	121	33	123	687	142	248	1.91	439
07	3	72.0	24.0	83	13,777	3.90	538	47	84	55	114	697	149	294	2.14	403
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BRFED AV.	58	1,490.9	25.7	83	10,467	4.06	424	42	80	44	125	513	118	221	2.14	293

May 1, 1968-April 30, 1969

MILK LEVFL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	EAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	DRY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	9	239.1	26.6	80	7,947	4.01	318	39	78	55	106	391	96	202	2.54	188
02	14	346.8	24.8	81	9,100	4.02	366	39	68	44	134	471	100	204	2.24	268
03	18	483.2	26.8	85	9,994	4.05	405	42	88	46	86	484	103	193	1.93	291
04	20	584.6	29.2	95	11,044	4.02	444	44	115	38	110	553	113	217	1.97	336
05	9	213.4	23.7	84	11,774	3.93	462	54	91	36	97	560	117	198	1.69	361
06	10	261.3	26.1	84	12,945	4.13	535	45	83	40	153	742	145	252	1.95	489
07	3	94.2	31.4	82	14,723	3.89	573	49	126	36	122	829	154	268	1.81	561
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BRFED AV.	83	2,222.6	26.8	83	10,594	4.02	426	43	91	42	113	540	112	212	2.03	328

May 1, 1969-April 30, 1970

MILK LEVFL RANGE	HERDS NO.	COW YEARS NO.	COWS PER HERD NO.	DAYS IN MILK PCT.	MILK LB.	EAT PCT.	FAT LB.	CONC. CWT.	SUCC. FOR. CWT.	OPY FOR. CWT.	PAST DAYS NO.	VALUE PROD. DOL.	COST CONC. DOL.	FEED COST DOL.	FC/CWT. MILK DOL.	INCOME OVER FEED COST DOL.
01	11	285.1	25.9	82	7,700	4.08	314	39	69	40	134	388	85	174	2.27	214
02	6	212.7	35.5	83	8,885	4.08	363	38	119	37	79	496	107	211	2.38	285
03	19	524.9	27.6	83	9,981	4.03	403	45	90	45	89	506	115	209	2.10	296
04	17	521.3	30.7	85	10,977	4.00	439	44	117	39	97	575	113	205	1.87	370
05	9	212.1	23.6	86	12,211	3.97	485	48	86	36	130	676	132	232	1.91	443
06	5	141.8	28.4	85	12,742	4.00	509	47	94	39	127	712	135	251	1.98	461
07	4	106.0	26.5	86	16,238	4.01	652	53	67	44	174	994	187	298	1.84	696
08	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
09	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
10	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
11	0	0.0	0.0	0	0	0.00	0	0	0	0	0	0	0	0	0.00	0
BRFED AV.	71	2,003.9	28.2	84	10,603	4.02	426	44	94	41	109	567	117	214	2.05	353

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
BELTSVILLE, MARYLAND 20705

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE & FEES PAID
United States Department of Agriculture